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ENTERPRISE FINANCE IN ZIMBABWE

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Report prepared by
Marcel Fafchamps, John Pender and Elizabeth Robinson

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Introduction

This report is part of a series of studies on enterprise finance undertaken in Sub-Saharan Africa under the auspices of the multi-donor Regional Program for Enterprise Development (RPED) which is coordinated by the Division on Private Sector Development and Economics in the Africa Technical Department of the World Bank. Previous enterprise finance studies were carried out in Ghana (Cuevas et al. (1993); Fafchamps (1994)) and Kenya (Fafchamps et al. (1994)).

Economic liberalization has opened new opportunities in Africa. Whether these opportunities translate into faster growth rates and higher standards of living for Africans depends on the ability of African economies to take advantage of them. Short of enlarging their export base, African economies will continue to be governed by the vagaries of commodity prices. Many had hoped that structural adjustment would set up the stage for rapid growth in non-traditional exports, and particularly for increased industrial competitiveness. Ten years after the first structural adjustment programs were initiated, Africa still has to demonstrate it can successfully export manufactured products. One of the key objectives of the present study is to ascertain whether imperfect access to credit is a major cause for Africa's lackluster performance in manufacturing. It complements other studies on industrial technology (e.g., Teitel and Thoumi (1994)) and manufacturing exports (e.g., Biggs et al. (1994)) and is accompanied by in depth analysis of panels of 200 manufacturing firms in seven Sub-Saharan African countries.

Over the month of August 1994, we conducted detailed interviews with a sample of 57 Zimbabwean firms. Two third of these firms were selected randomly from a larger panel of 200 firms belonging to four manufacturing sectors perceived to have high export potential: textile and garment; food processing; wood products; and metal products. The last third is composed of wholesale and retail firms in Harare. The interviews covered many aspects of enterprise finance and complemented the extensive information already collected during the RPED panel survey. Qualitative aspects relative to finance, investment, and cash flow management were discussed in detail. In addition, conversation were also held with high level bank staff representing various categories of financial institutions. To gain a better perspective on the difficulties encountered by black-owned firms, we also interviewed a few small to medium size African businesses.

The information collected, properly analyzed and compared with evidence from other countries, permits an accurate assessment of the problems various categories of firms face in accessing external finance, raising sufficient funds for investment, and managing liquidity shocks. It also helps identify policy actions that can remedy some of the observed imperfections and facilitate financial intermediation. We are deeply aware of the limitations involved in doing case studies and in working with a sample of limited size. A larger panel study has uncovered a series of empirical regularities regarding enterprise finance in Zimbabwe, but has left many of them unexplained (Bade and Gunning (1994)). To uncover plausible explanations, an in depth analysis of specific cases was required. Only such an approach could provide the richness of information required to understand the processes at work. The case study approach thus can be seen as an indispensable complement to a larger data collection exercise and its result can only be interpreted in conjunction with results from the panel data.

The report is organized as follows. In chapter 1, we provide background information on Zimbabwe, its economic structure, and its recent history. In chapter 2 we review a large body of theoretical and empirical literature in search for concepts applicable to enterprise finance in a developing country setting. We organize some of these concepts around the theme of contract enforcement and show how it subsumes many information asymmetries and transaction costs. The financial sector of Zimbabwe is briefly described in chapter 3. Financial instruments and legal institutions are discussed and the attitude of financial institutions scrutinized. Chapter 4 focuses on the pattern of enterprise finance in Zimbabwe. Differences among firms in access and cost of various forms of credit are reviewed in detail. Firm size and ethnicity are shown to play an important role in access to external finance. Enforcement problems and information asymmetries are examined in chapter 5. Results indicate that credit transactions are more flexible than often believed and that enforcement concerns are central to the credit screening process. They also demonstrate that Zimbabwe benefits from the existence of several overlapping reputation mechanisms that sanction contract performance. Firm growth and investment are reviewed in chapter 6. Credit constraints affect firm performance in two ways: by restricting their capacity to expand, and by limiting their ability to survive liquidity shocks. We synthesize our results at the end of chapter 6 by constructing a typology of firms and assessing their

potential for growth and expansion. Policy implications are presented in chapter 7. Detailed policy prescriptions are derived for various categories of firms. A special emphasis is put on the promotion of indigenous enterprises.

Chapter 1. The Economic Situation

Section 1. Overview of the Economy

Zimbabwe has one of the most advanced and diversified economies in sub-Saharan Africa. Per capita gross domestic product (GDP) in 1990 was nearly $2,000 (purchasing power parity equivalent), sixth highest in sub-Saharan Africa. Zimbabwe's manufacturing sector accounted for 26% of GDP in 1990, a level comparable to that in South Africa and substantially higher than in most other African countries. Other industrial activities, particularly mining, also contribute a substantial share of GDP (14 percent in 1990), while agriculture accounted for only 13 percent of GDP in 1990. The manufacturing sector is quite diversified in Zimbabwe, producing about 7000 different products (Riddell (1988)). The main subsectors include food processing (20 percent of manufacturing value added in 1988), metals and metal products (20 percent), textiles and clothing (18 percent), chemicals and pharmaceuticals (16 percent), and beverages and tobacco (10 percent) (RPED (1993)).

Trade is key to Zimbabwe's economy. Most exports are primary commodities, while manufactured goods accounted for 32 percent of the value of merchandise exports in 1992. Metal products are the largest manufactured export, followed by textiles and clothing, foodstuffs, and chemicals and pharmaceuticals. The structure of the economy is highly dualistic. Most of the larger firms are owned by whites, while black entrepreneurs primarily own microenterprises employing fewer than 10 people (Daniels (1994)). Less than one third of the labor force is employed in the formal sector (commercial agriculture, industry, government, trade and commerce, education, health and finance), with most of the remainder employed in agricultural activities in the Communal Areas (RPED (1993)). Incomes are substantially higher in the urban and formal sectors than in the rural and informal sectors. Income distribution in Zimbabwe is among the most unequal in Africa.

The population of Zimbabwe is relatively well educated and healthy compared to other sub-Saharan African countries. Overall, 82 percent of the population is literate (Barclays (1994)) reflecting the strides that have been made in improving education since independence. Health indicators have also risen substantially as a result of better education, immunization, provision of safe drinking water and other measures. In addition to its industrial and human capital base, Zimbabwe has a solid infrastructural base. It has an extensive road network and a railway system connecting the major cities to ports in South Africa and Mozambique. Electricity and telecommunications are widely available in the major cities, but much less in rural areas.

Section 2. Historical Background

Many of the present features of Zimbabwe's economy are rooted in its colonial past. Much of the nation's development was driven by the agriculture and mining sectors during the early colonial period. The manufacturing base began to develop rapidly during World War II, as foreign supplies of manufactured goods became unavailable and external demand increased (Wield (1981)). Following the Unilateral Declaration of Independence (UDI) in 1965 and the imposition of sanctions by Britain, the Smith government pursued a policy of import substitution and direct control of most aspects of economic activity, including trade, foreign exchange, prices, wages, interest rates, investment and repatriation of profits. Foreign exchange, credit and investment policies sought to avoid duplication by preventing competition with established firms. These policies contributed to the advantages of established white owned firms and to the high degree of concentration in Zimbabwe's industry. Despite significant diversification and growth during the early UDI period, the economic gap between blacks and whites increased and the bonds among white businesses strengthened. Many present firm owners and managers recall the "siege mentality" of that period, when they were forced to cooperate with their competitors in sharing raw materials or equipment because of limited availability of imports and foreign exchange allocations. Firms learned to make do with aging equipment or by sharing scarce imported capital equipment or inputs. Nevertheless, the scarcity of such items contributed to the decline in manufacturing output, which fell 14 percent between 1975 and 1979 (Stoneman and Davies (1981)).

After independence in 1980, the socialist government of Prime Minister Mugabe continued many of the economic policies of the Smith government. Though Mugabe's social objectives were very different from those of Smith, the heavy government controls and inward orientation were seen as useful tools for achieving rapid growth with greater equity. Zimbabwe's economic performance during the 1980s was disappointing after the strong post-war recovery in 1980 and 1981. Gross investment peaked in 1981 and remained at or below 20 percent of GDP for the rest of the decade. In addition, government accounted for an increasing share of the investment, crowding out private

investment because of limited foreign investment and domestic savings. Exports also declined after 1981. Although weather and commodity price conditions were major factors contributing to the ups and downs of the economy, they do not explain the slow average growth or the low investment or export levels achieved after 1981.

By the end of the decade, the government recognized that the extensive system of controls it used to regulate the economy was constraining its ability to realize its growth potential. Since most investments require imported capital equipment, spare parts and often imported raw materials, foreign exchange controls were a severe constraint on investment and production. Interest rate restrictions and increasing inflation led to negative real interest rates during much of the decade, limiting the ability of the financial system to mobilize savings and allocate capital efficiently. Wage and price controls contributed to unemployment and shortages of goods while investment regulations inhibited firms' ability and willingness to expand into potentially profitable areas. Rapid growth in government spending and the budget deficit contributed to growth in aggregate demand and in domestic credit, causing inflation to increase by the end of the decade and adding to the problems of exchange rate overvaluation, negative real interest rates and crowding out of private investment by government borrowing. In response to these problems, the government initiated a series of policy reforms, beginning in 1988. It became clear, however, that more fundamental reforms were needed if Zimbabwe was to put itself on a long term growth path.

Section 3. The Economic Reform Program

In January 1991, the government initiated a bold five year plan for liberalizing the economy. The goals of the plan included reform of fiscal and monetary policies, trade and foreign exchange liberalization, and deregulation of the domestic economy. The plan also sought to mitigate the adverse impacts of the adjustment program on vulnerable groups. By mid-1994, substantial progress had been made toward most of these goals. Foreign exchange and trade have been almost completely liberalized. The currency was devalued 36 percent in 1991, and depreciated again in late 1992 and early 1993 (RPED (1993)). At the end of 1993, the currency was devalued 17 percent and a two-tier foreign exchange system was established through which exporters could retain 60 percent of their earnings in Foreign Currency Accounts which were freely tradable on the interbank market. This system has since been abolished (in July 1994) and the exchange rate made fully convertible for all commercial and current account transactions. These changes have eliminated the old system of import control via control of foreign exchange allocation, and nearly all imports are now unrestricted. Tariffs and import taxes have been reduced, most recently by the 1994/95 budget which cut the import surtax from 15 percent to 10 percent. Export subsidy programs have also been eliminated, including the 9 percent Export Incentive Scheme (Standard Chartered (June 1994)). At the end of 1993, the Reserve Bank stopped offering forward cover for foreign exchange purchases, which had until then been available at a highly subsidized rate.

Regulations also have been greatly reduced. Price control has been eliminated on almost all commodities. Investment approval requirements have been abolished for domestic investors and reduced and simplified for foreign investors. Restrictions on the repatriation of profits from new foreign investments have been removed. Procedures for hiring and firing employees have been streamlined and a national code of conduct established through which industries and firms can establish their own procedures through collective bargaining. Minimum wages have been eliminated for industrial workers and replaced by a process of collective bargaining. Steps have been taken towards easing local regulations that inhibit small business development. The urban transport sector has been opened up to competition. The financial sector has been deregulated. Interest rate restrictions were removed and bank liquidity requirements reduced in 1991. As a result, real interest rates (measured by the difference between the rate on 90 day negotiable certificates of deposit and the inflation rate) became positive in 1991 for the first time in several years, and have been positive (but usually under 10 percent) ever since, except during the rapid inflation in 1992 caused by the drought (Standard Chartered (January 1994), RBZ (1994)). Commercial bank liquidity ratios fell from 44 percent in 1990 to 11 percent in 1991 after the statutory rate was reduced to 10 percent, indicating that excessive bank conservatism was not responsible for the high liquidity in the sector (RBZ (1993)). The stock market was opened up to foreign investors in June 1993, which together with the reforms announced at the end of 1993 caused an unprecedented boom. Average prices of industrials rose 291 percent and mining shares 367 percent between May 1993 and February 1994. The total value of shares including new issues more than quadrupled (RBZ (1994)).

Many tax rates have been cut since the reform program began. The maximum individual marginal tax rate has been reduced from 60 percent in 1990/91 to 40 percent in 1994/95 and the threshold income for taxation raised, while the corporate tax rate has been decreased from 50 percent to 37.5 percent. Taxes on dividends, capital gains on

securities, and on imports have also been lowered. In addition, sweeping tax concessions to firms operating in Export Processing Zones were announced in the 1994/95 budget, including a five year tax holiday followed by a flat tax of 15 percent on profits, and exemption of such firms from capital gains tax, branch profits tax, sales tax, customs duties, and some other taxes on non-residents. Less progress has been achieved with regard to deficit reduction. According to the 1994/95 budget, government spending and taxes have been reduced relative to GDP and the budget deficit is projected to fall to 5.0 percent of GDP in the 1994/95 fiscal year. However, the reductions in spending and the deficit are somewhat illusory since $2.5 billion (over 5 percent of GDP) in losses of public enterprises will be carried forward to future years (Standard Chartered (August 1994)). In addition, only about half of the planned reductions in the civil service have been achieved (Finhold (June 1994)).

The fiscal imbalance has contributed to inflationary pressures, which have also been affected by the 1992 drought, currency devaluation, wage demands, and deregulation of the financial sector. Inflation has exceeded 20 percent in each of the past three years (exceeding 40 percent during the drought year of 1992) and has been above 20 percent for most of 1994. Growth in the money supply (M2) has also exceeded 20 percent in each of the past three years, and in 1993 M2 grew 61 percent (RBZ (1993), IMF (1994)). Concerned about rapid monetary growth and continued high inflation, the Reserve Bank tightened monetary policy in May 1994, increasing its rediscount rate, reducing access to its lending window and increasing banks' required reserve ratios. As indicated by the continued losses of public enterprises, progress in increasing the efficiency of these enterprises has been slow. The government has announced its intention to commercialize and later privatize public enterprises, and established a Cabinet Committee on privatization in the 1994/95 budget. The Dairy Marketing Board was commercialized in July 1994. The Grain Marketing Board no longer has a monopoly on grain marketing, and private agents are entering into agricultural marketing. In addition to ownership of public enterprises, the government still maintains large holdings of private equities, including a 40 percent share of Delta, one of the three major holding companies in the country.

Some programs have been instituted or expanded to assist groups affected negatively by the reform program, or to promote African businesses. A Social Dimensions Fund has been established to help retrain displaced workers and to provide assistance to others who cannot afford food and social services. The government is promoting African owned businesses via low interest loans provided by the Small Enterprise Development Corporation (SEDCO), Zimbank, the Zimbabwe Development Bank (ZDB), and credit guarantees provided by the Credit Guarantee Company (CGC). New institutions have been established to promote small business including the Venture Capital Company of Zimbabwe (VCCZ) and the Business Extension and Advisory Service. Other policies to promote African businesses include preferential purchasing policies of the Central Purchasing Agency and reducing zoning and other regulatory barriers to small businesses. Overall, there has been significant growth in the small business sector, with employment in small firms (those employing 50 or fewer people) growing 14 percent between 1991 and 1993, primarily in rural areas (Daniels (1994)). However, few small businesses have benefited from the credit and other policies intended to assist them (Ibid.).

Section 4. Recent Economic Performance and Prospects for the Future

In 1991, after the economic reform program began, real GDP grew at a solid pace of 4.3 percent. Then, in 1992, Zimbabwe experienced the worst drought of the century. Agricultural output plummeted 35 percent, and real GDP fell more than 6 percent (Barclays (1994)). Soaring food prices contributed to a surge in inflation, which reached 42 percent in 1992. Despite the difficulties of undergoing structural adjustment in such severe economic circumstances, the government continued the program of reform and in 1993, modest economic growth resumed. Economic growth has strengthened in 1994. Other aspects of aggregate economic performance have shown mixed results. Exports have increased, with merchandise and gold exports growing from 29 percent of GDP in 1990 to an estimated 32 percent in 1992 and 1993 (Finhold (June 1994)). Still, imports have grown even more rapidly, leading to a widening trade deficit and increased foreign debt, which reached 86 percent of GDP in 1993 (RBZ (1993)). Comprehensive data on investment are not available for the post-1990 period, but ZIC data suggests that investment increased in 1992, fell slightly in 1993 and showed signs of a strong increase in the first quarter of 1994 (Standard Chartered (June 1994)). Inflation has declined since 1992, though it continued in excess of 20 percent during the first half of 1994. The exchange rate has stayed remarkably stable after the devaluation at the beginning of 1994, with the currency appreciating slightly against the U.S. dollar (in nominal terms) between January and August as Zimbabwe accumulated foreign exchange reserves.

Economic performance has varied by sector. Agriculture has recovered since the disastrous 1992 drought, and improved prices for tobacco have restored confidence and increased area planted by tobacco farmers. Overall, mining production declined slightly between 1990 and 1993, though gold production rose modestly (Finhold (June 1994), FMB (1994)). Manufacturing production declined 17 percent between 1991 and 1993, in part due to reduced demand resulting from the recessionary effects of the drought (Finhold (June 1994)). Substantial declines were experienced in most manufacturing sectors, but especially in foodstuffs, metals and metal products, textiles and clothing, chemicals and petroleum products, and transport equipment (RBZ (1993)). The manufacturing sector recovered in early 1994, with the volume of manufacturing production up 18.7 percent in the first quarter of 1994 over the first quarter of 1993 (Finhold (June 1994)). Leading the recovery were textiles, which grew by 58 percent, non-metallic mineral products (36 percent), wood and furniture (35 percent), paper, printing, and publishing (24 percent), beverages and tobacco products (18 percent), chemicals and petroleum products (13 percent) and clothing and footwear (13 percent). Among the most rapidly growing segments of the economy since 1990 are horticulture and tourism, which are becoming important sources of foreign exchange (Ibid.).

Despite the recovery in the manufacturing sector, the prospects for continued rapid growth in the near term are questionable. Import substituting firms are suffering from increased competition as a result of trade liberalization. Rapidly rising interest rates in the wake of financial liberalization, aggravated by large government borrowing, have increased the cost of borrowing and led to crowding out of private investment. Exporting firms have lost a significant source of profits available through selling foreign exchange under the former Export Retention Scheme, as well as the 9 percent export subsidy formerly available through the Export Incentive Scheme. Although the 17 percent devaluation of the currency at the beginning of 1994 helped to boost the competitiveness of both exporting and import competing firms, this may not have compensated many exporters for the loss of such incentives. Also, some firms have suffered as a result of having borrowed in foreign exchange without adequate forward cover prior to the devaluation. In addition, the exchange rate has appreciated in real terms since the beginning of the year as a result of domestic inflation, undermining some of the initial gain in competitiveness. Given the prospect of continued high inflation, further devaluations are likely, and this may limit foreign investment while increasing the risks faced by domestic investors. In the stock market, foreign interest has declined since the first quarter of 1994, and investors have shown much greater interest in mining and tourism than in manufacturing issues (Kyriakides (1994)).

Other factors contribute to the uncertainties of the present environment. The trade deficit and foreign debt have grown rapidly since 1990. Declines in real wages, which have fallen nearly one-third since 1990 and are at their lowest point in a quarter of a century, add to the potential for social unrest and to demands for renewed government intervention in labor markets (Standard Chartered Bank (August 1994)). High unemployment levels, by one estimate equal to 30 percent of the labor force, also contribute to these problems. And the end of apartheid in South Africa, which should benefit all of southern Africa in the long run as a result of increased trade and investment in the region, may harm Zimbabwe in the short run as investors pursue opportunities in South Africa rather than Zimbabwe. These concerns notwithstanding, the longer term prospects for growth in Zimbabwe in general and in its manufacturing sector in particular are very good, particularly if the government continues with the reform program and is able to reduce the budget deficit and inflation down to target levels. The fundamentals of the economy are sound. Zimbabwe benefits from a long period of political stability and democracy, strong legal and financial institutions, a relatively well educated work force, real wage rates that are competitive with other countries, and capable entrepreneurs. Zimbabwe's risk premium in international financial markets is among the lowest in Africa (International Finance Corp. (1994)). The economy is well diversified with a good infrastructural base. As a result of the Economic Reform Program, Zimbabwe is now able to build upon these strengths and increase its competitiveness in international markets, reorienting investment and production to those activities where it enjoys the greatest comparative advantage.

Naturally, this process requires some difficult adjustments, including retrenchment in some sectors as well as expansion in others. Thus, some areas of manufacturing may continue to stagnate or decline as the economy becomes more responsive to market realities, particularly those that have relied heavily on protection from imports. Nevertheless, there are many areas in which Zimbabwe's manufacturers are already successfully competing in world markets, and many new opportunities are likely to continue to become available as Zimbabwe makes its transition to greater openness to the world economy. The ability of Zimbabwe to successfully capitalize on the opportunities that become available during this transition will depend upon the functioning of the financial sector. For example, the high inflation and high interest rates that have resulted in part from heavy government borrowing are impeding the ability of firms to raise capital for new ventures. More generally, the efficiency of the financial sector in mobilizing savings

and in channeling those savings to the most productive uses is an important determinant of economic growth (King and Levine (1993)). In the remainder of this study, we examine the nature and functioning of the financial sector in Zimbabwe, and the implications this has for development of manufacturing firms.

Chapter 2. Literature and Concepts

In this chapter we review a broad range of literatures relevant to the understanding of financial institutions and contracts. We then present the concepts that underline our approach. In conclusion, we draw a succinct list of theoretical predictions to be compared with realities from Zimbabwe in the chapters that follow.

Section 1. The Literature

The economic literature on financial intermediation and enterprise finance has taken a new turn. For many years, Gurley and Shaw's (1955) initial contribution was buried under the Modigliani-Miller (1958) paradigm: most economists, convinced less by facts and reason than by the sheer elegance -- and convenience -- of the Modigliani-Miller theory, asserted that all sources of finance were equivalent and abstracted from financial considerations in most of their work. Recent years, however, have witnessed a renewed interest in financial intermediation and in its effect on private investment and macro-economic conditions. It is indeed increasingly recognized that information asymmetries, transaction costs and enforcement problems are prevalent in all credit transactions and that, as a result, credit markets are imperfect: certain candidate borrowers are turned down for credit, others receive less than they need, interest rates and other credit terms differ among borrowers and lenders. In consequence, many authors have argued, credit allocation and investment opportunities are unlikely to be matched perfectly and inefficiency will result. The more severe credit market imperfections are, the more distorted investment will be, and the lower growth is. Understanding how financial markets work is thus an essential prerequisite in understanding why Africa's response to structural adjustment has been disappointing, and in particular why the manufacturing export response has been slow and limited (see, however, Biggs et al. (1994)).

In this first section, we briefly highlight many of the themes that run through the literature on financial intermediation and credit markets (see also Gertler (1988)). We show how various literatures are related and we discuss some of the predictions current theory makes regarding access to credit and its effect on investment. Next, we introduce trade credit, a widely used but little studied form of enterprise finance, and we propose various explanations for its existence. Finally, we propose a unifying conceptual framework that takes contract enforcement as starting point. Most information issues and many transaction costs are shown to fit naturally within this framework. We then discuss how contract compliance is affected by the need for risk sharing. We finish this conceptual section by debating the importance of trust and reputation in enabling economic exchange -- and credit -- to take place.

Financial Intermediation

In development economics, the Modigliani-Miller paradigm never really took roots. The recognition of the role of credit in facilitating the accumulation of capital persisted since the early works of Gurley and Shaw (1955), Gerschenkron (1962), and Nurkse (1952). It was amplified by contributions by McKinnon (1973) and Shaw (1973) on the interactions between monetary policy and credit and by the work of Cameron (1972) on the historic role of banking in economic development. In the 1970s, development economists took a serious interest in forms that economic exchange take at the micro level and began drawing a typology of contracts applicable to Third World villages. As a result, they were among the first to seriously consider and model the effects of transaction costs and information asymmetries on individual contracts (Bardhan, 1993). Concepts initially developed to understand sharecropping (Cheung (1969); Newbery (1974); Stiglitz (1974)) were later extended to labor and credit contracts (e.g., Bardhan (1984); Bardhan and Rudra (1981); Feder (1985); Lipton (1981)). The works of sociologists and anthropologists on the importance of long term relationships and multiplex interactions among Third World communities (e.g., Gluckman (1955); Meillassoux (1971); Geertz, Geertz and Rosen (1979)) were modeled as repeated games (e.g., Kimball (1988); Coate and Ravallion (1993); Fafchamps (1992, 1994)) and interlinked contracts (e.g., Braverman and Stiglitz (1982); Bardhan (1989), part III). As a result, incentive issues, contract enforcement problems, adverse selection, and rationing have long become the bread and butter of development economists. Some of their latest work is on micro-finance, particularly on rotating savings and credit associations (Besley, Coate and Loury (1993); van den Brink and Chavas (1991); Aryeetey and Steel (1993)), group lending (Besley and Coate (1993)), money lenders (Pender (1994) and quasi-credit (Platteau and Abraham (1987), Udry (1990), Fafchamps 1994).

For a long time, however, the application of these ideas remained confined to tropical villages which were considered an exotic exception to the Modigliani-Miller rule. One had to wait for the formalization of adverse selection

and moral hazard arguments (e.g., Akerlof (1970); Stiglitz (1974)) and the triumph of information economics before these ideas eventually migrated to other fields. Today, financial intermediaries anywhere are no longer viewed as transparent. Even though market imperfections may be less marked in sophisticated economies than in tropical villages, they are nevertheless perceived as a reality and a serious threat to economic efficiency. Recent empirical evidence has generally come to support the view that firms in developed economies have unequal access to finance, that investment is influenced by the financial structure of the firm, and that firm survival is helped by access to finance (e.g., Fazzari, Hubard and Petersen (1988); Oliner and Rudebusch (1992); Fazzari and Petersen (1993); Holtz-Eakin, Joulfaian and Rosen (1994)).

The major theoretical contributions of information economics and its applications to financial contracts concern moral hazard and adverse selection. We discuss the former first and the latter second. When a lender cannot observe the actions taken by the borrower, it may be in the lender's interest to modify the full information first best contract so that the borrower has an incentive to act in the joint interest of lender and borrower (Grossman and Hart (1983)). One way to incite borrowers to take appropriate actions is to force them to pitch in some their own money. Moral hazard then leads to rationing in the size of the loan: only a fraction of the cost of a project is lent, a minimum downpayment is required from the borrower. Another way of deterring bad behavior is to promise future lending at better conditions as a reward, or to threaten to discontinue lending as a punishment (e.g., Laffont and Tirole (1988)). Relative evaluation can be used if the actions of the borrower are only imperfectly observable *ex post* (Radner (1985)). If the interruption of an economic relationship between two agents is commonly observable, then it can also be used to stigmatize bad behavior. Stigma can then be used as an additional punishment: borrowers who have been turned down for credit by their bank may be turned down by other banks as well on this sole basis. Even if the interruption of a relationship is itself unobservable, the fact that someone has no bank may make that person somewhat suspicious. As Shapiro and Stiglitz (1984) have shown for employment contracts and Greif (1993) for agency contracts, the existence of a two-tier market can then be used as a disciplining device.

When borrowers come in various types, some of which are more risky than others, and the lender cannot observe the lender's type, then a rationing equilibrium may result in which some borrowers either do not receive any credit at all, or receive only a portion of what they demanded (Jaffee and Russell (1976); Stiglitz and Weiss (1981); Gale and Hellwig (1985), Mankiw (1986)). Alternatively, the lender may propose a menu of contractual forms in which borrowers of various types self-select themselves. Assume, for instance, that borrowers come in two types, those with a small safe project, and those with a big risky project. Borrowers could then be forced to reveal their type by making available to them credit for small investments and equity for large investments. If the size of the firm is observable, and what is risky is rapid expansion, then a certain type of finance, say an overdraft facility, may be available only to finance small credit needs, say working capital or small equipment purchases, while rapid expansion of the firm relative to its current base would have to be financed from other sources (e.g., project finance, equity finance, venture capital). A similar argument could be used to explain why financial intermediaries customarily propose menus of relatively rigid financial instruments to their clients, instead of arranging specific contracts to fit the expressed needs of each customer.

Another set of articles have considered how asymmetric information affects equity markets. Myers and Majluf (1984) and Greenwald, Stiglitz and Weiss (1984) have shown that because managers have better information about the firm than shareholders, managers may be tempted to offload bad debt onto equity holders. Recourse to equity financing will then be interpreted with suspicion and equity rationing will result. Arguing that any form of outside finance involves agency costs and are subject to rationing, and that different types of incentive problems plague different sources of finance, Jensen and Meckling suggested (1976) that firms are likely to adopt a pecking order when deciding how to finance a project. Internal finance, they argue, is likely to be the preferred source of finance because it minimizes information, agency and transaction costs (see also Myers (1984) and Hellwig (1989)).

Because imperfect information entails an efficiency loss (contracts that depart from first best, unwanted transactions with bad borrowers, missed transactions with good ones), economic agents may accept to spend real resources to collect information. Information asymmetries thus explain not only the form that contracts take and the existence of contract menus and rationing; they also account for a wide range of transaction costs having to do with the screening and monitoring of contractual parties (Williamson (1975, 1985)). Information asymmetries may also induce the lender to use observable characteristics to infer the borrower's type. Signaling, that is, the costly acquisition of an intrinsically useless characteristic is one possible outcome of this situation (Spence (1974)). Discrimination is another whenever the lender relies, say, on the size of the borrower's firm, its sector of activity, or the borrower's sex,

ethnicity, race, and education as indicators of riskiness. As Coate and Loury (1993) have shown in the case of employment contracts, prejudice may be self-fulfilling: if borrowers with different observable characteristics expect to be treated differently, they may adopt attitudes or invest in unobservable qualification and competence in a way that makes discrimination optimal *ex post*.

Another body of theory that is revelant for our purpose focuses not so much on information per se but on the institutional mechanisms that enforce contracts. North (1990) has long emphasized the paramount importance of well defined property rights for business to flourish. In his mind, property rights encompass not only the delimitation of legal rights to modify or alienate things, but also the adjudication of disputes on who owns a particular item or sum of money (North (1993)). Legal institutions for the resolution of commercial disputes are part of what North calls the necessary enabling institutions. This view implicitly permeates most of the economic literature on credit and financial intermediation through the use of one common assumption: the existence of a special category of assets that have collateral value (e.g., Stiglitz and Weiss (1981)). This assumption is but a reflection of the widespread use of mortgages and other forms of legal security in commercial loans. An interesting, but not always explicitly acknowledged advantage of collateral is that it is a substitute for information. Indeed, if the legal system is well defined, sufficient collateral is provided, and the value of this collateral is not subject to price fluctuations, then the lender does not need to know the borrower's type or to provide incentives for proper action: the collateral ensures that the contract will be complied with, no matter what. It is only if collateral is insufficient that information asymmetries become a cause of concern for the lender.[1]

Recourse to courts and legally sanctioned collateral, however, is not the only possible mechanism for the enforcement of contracts. The promise of future business, the threat to one's reputation, the cultivation of honest commercial practices, the harassment of contractual offenders are other possible ways by which parties to a contract may be incited to comply with their obligations. Milgrom, North and Weingast (1991), for instance, show how the Law Merchant operated like a reputation mechanism to deter breach of contract. Greif (1993) demonstrates how reputation may have been used by Maghribi traders to ensure discipline among their agents in other cities. These ideas have long been applied to financial contracts of a particular type: those involving a sovereign borrower. Because a sovereign cannot be forced to part with domestic assets, the legal enforcement of contracts cannot be used to explain the existence of sovereign lending. Two alternative explanations have been proposed in the literature. The first relies on repeated interaction: if the withdrawal from future loans imposes a sufficiently severe penalty on the borrower, repayment of current loan obligations may be assured (Eaton and Gersovitz (1981), Kletzer (1984), Grossman and van Huyck (1988)). The second relies on harassment: lenders often are legally entitled to seize goods and international money transfers originating from or going to the sovereign. In their efforts to retrieve their money, they may thus disrupt the borrower's international trade and impose an economic cost on the borrower equal or superior to what they recover (Gersovitz (1983), Bulow and Rogoff (1989)). Similar ideas can be applied to private contracts as well: the incentive to repay a private debt is strengthened by the threat of ostracism or harassment beyond what can be achieved by legal sanctions alone. A rational lender should not lend beyond the equivalent variation of the combined subjective value of all the penalties that can be inflicted upon a delinquent debtor (seizure of assets, loss of reputation, loss of future trade, fear of subsequent harassment, guilt). Imperfect contractual enforcement thus generates yet another form of rationing: borrowers are unlikely to qualify for credit if they cannot credibly be convinced to repay (Fafchamps (1994)).

In practice, enforcement issues can rarely be separated from information asymmetries and transaction costs. The lender seldom has all the necessary information to evaluate how costly punishment would be to the borrower and consequently how much he or she may be willing to pay *ex post* to avoid being punished. Adverse selection is thus likely to be present. Next, the transaction costs in securing legal collateral are generally non negligible. Taking formal legal security may prove utterly unpractical for small loans. Finally, in the presence of uncertainty, there will always exist states of nature in which the borrower is unable to repay -- or equivalently, in which repayment would impose

[1]In practice, to seize and sell collateral is costly and time consuming. The Law typically sets limits on the proportion of these costs that can be passed on to a delinquent debtor (e.g., legal interest rate). Under such circumstances, the lender may prefer to be paid instead of having to realize the collateral.

a cost on the borrower that is deemed excessive by society.[2] Many borrowers also insulate part of their assets from creditors by forming limited liability companies. As Zame (1993) demonstrated, the presence of risk means that raising the penalty for default beyond a certain limit can do away with credit altogether. If the penalty for default is infinite (or if default is never allowed, which is equivalent), work by Zeldes (1989) and Carroll (1992) has indeed shown that no credit will take place: economic agents will be too afraid of incurring the penalty that they will never accept becoming net borrowers. Forbidding all default is thus not economically efficient. Allowing default if the debtor is unable to pay, however, raises the possibility of moral hazard: a borrower may choose a risky project because he benefits fully from the upside risk but only bears part of the downside risk (Hellwig (1977); Stiglitz and Weiss (1981)).

Financial market imperfections have adverse effects not only on the welfare of candidate borrowers but also on the economy as a whole. Financial intermediaries emerge in an effort to mitigate credit market imperfections that result from information problems (Diamond (1984), Bernanke and Gertler (1990)). The allocation of savings and investment is likely to be inefficient (Gurley and Shaw (1955); Townsend (1979); Green (1987); Townsend and Wallace (1987); Green and Oh (1991); Pender (1992)). Business cycles may be generated or amplified by financial crises (Bernanke (1983), Scheinkman and Weiss (1986)). Economic growth may be impeded by the absence of supportive financial institutions (Fielding (1993)). Frankel and Montgomery (1991), for instance, compare commercial banks across countries and argues that the relative economic performance of four developed countries is in part due to differences in the institutional characteristics of their respective banking systems (see also Mayer (1988)). In the context of developing countries, proper monetary and credit policies (McKinnon (1973), Shaw (1973)) and proactive banking attitudes (Gerschenkron (1962)) have been said to be prerequisites for rapid industrialization. Inadequate access to finance has also been identified as a possible impediment to rapid structural adjustment; it may explain the lack or timidity of a manufacturing exports response to large changes in relative prices (Steel and Webster (1991)). Understanding how finance works in Africa is therefore essential to assess the causes of the disappointing performance of structural adjustment programs there.

Trade credit

A special category of credit that is very important in enterprise finance has received very little attention from economists, namely, trade credit. The provision of credit by suppliers of goods and commodities to and from their clients is discussed in all corporate finance textbooks (e.g., Weston and Copeland (1986); Johnson and Kallberg (1986)) and is indeed a widespread practice in developed countries (e.g., Schwartz and Whitcomb (1979), Dun and Bradstreet (1970)) as well as in Zimbabwe (see infra).[3] In its most frequent form, it works as follows: suppliers deliver goods to clients more or less on a continuous fashion. On the 25th or at the end of the month (Dun and Bradstreet (1970)), they invoice their clients for the total value of monthly deliveries and give them a set time to pay. Credit terms vary across firms and industries but typically revert around 30 to 60 days from date of statement (Schwartz and Whitcomb (1979)). In the case of exports, supplier credit may extend to longer periods, e.g., 90 or 120 days (van der Toorn (1986)). In the U.S., the average delay between delivery and payment -- measured as the ratio of receivables over sales -- is 26 days in the food sector, 39 days in the textile and garment sector, 32 days in the wood and furniture sector and 44 in the metal sector.[4] The average collection period rarely exceed 60 days. In some cases, a cash discount is offered if payment is made within a few days of invoicing.[5]

Having described what trade credit looks like, we must explain why it exists. Nadiri (1969), Schwartz (1974), Schwartz and Whitcomb (1979), Ferris (1981), and Emery (1984) suggest several possible explanations for the existence of trade credit: a transaction motive, a pricing motive, a financial motive, a sales promotion motive, and a

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[2]Laws in many countries protect some of the borrower's assets from seizure (e.g., certain items of furniture, minimal take-home pay). Labor bonding and slavery are also universally prohibited.

[3]Trade credit is usually not subject to regulations regarding financial institutions (e.g., Oditah (1992)) but the interest rate charged on supplier credit may be regulated.

[4]Computed as the average median collection time over all subsectors of the relevant SIC classification (20 for food products, 22 and 23 for textile and apparel, 24 and 25 for wood products and furniture, and 44 for metal products) reported in Duns Analytical Services (1993).

[5]An additional discount may also be given if payment is made on delivery or shortly thereafter.

verification motive. The *transaction motive* is the most straightforward: in order to simplify payments, it is convenient for both supplier and client to combine deliveries into a single periodic invoice. This economizes on mail exchanges, transfers of funds, and paperwork in general. Trade credit then becomes part of inventory decisions (e.g., Fewings (1992a, 1992b)). The *verification motive* notes that the client may need some time to inspect the quality and quantity of the goods delivered. This is particularly true when the volume of purchases is high and the buyer cannot inspect each consignment on the spot. Long, Malitz and Ravid (1993) and Lee and Stowe (1993) provide regression evidence that trade credit in the U.S. conforms to the quality verification motive. Although these two motives alone can account for the existence of trade credit, it is difficult to argue that they explain credit for more than a short duration.

A *sales promotion motive* may be present when a supplier with excess inventory downloads some of his stocks onto his clients but tells them to pay later. So doing the seller transfers inventory costs onto the buyer. By granting trade credit, a supplier may also gain an edge over the competition by making sure that his or her products are always present in the client's shop or factory. According to this logic, one would expect the length of credit terms to be commensurate to the length of time the goods remain in the client's inventory. The implicit interest rate may also be below the market rate to induce the client to take on additional inventory. The sales promotion motive alone, however, is insufficient to account for trade credit: in the presence of perfect credit market, the client should indeed be able to raise from elsewhere the funds necessary to finance more inventory. All that the sales promotion motive explains is a desire to reduce the cost of the good to the customer. The *pricing motive* applies when the seller uses credit terms to discriminate among customers. As Schwartz and Whitcomb (1979) themselves acknowledge, the price differential achievable in this way is limited to a few percentage points. Also, trade credit is useful only if the supplier is not legally allowed to price discriminate or incurs some menu cost when doing so. In practice, the pricing motive is most relevant when the supplier grants credit on large purchases only, in which case trade credit operates somewhat like a quantity discount.

The only reason that can explain the prevalence of trade credit extending beyond a few days is the *financial motive*, namely that the supplier has better access to finance than the client, or that the client is reluctant to use the limited finance he or she has access to in order to finance inventories. Viewed in this way, trade credit resembles closely the interlinked transactions studied in the context of rural credit markets (e.g., Braverman and Stiglitz (1982)).[6] According to the financial motive, one would expect trade credit to flow mostly from cash rich to cash poor firms. Schwartz and Whitcomb (1979) indeed show that supplier credit represent a larger proportion of total debt for small firms which are, presumably, more likely to be subject to liquidity constraints. Nadiri (1969) provides evidence that the liquidity position of firms influences their willingness to extend trade credit. For the financial motive to be a convincing explanation for trade credit, however, one must indicate why supplier and client have different access to finance, and why the supplier is in a better position to grant credit than a specialized financial institution. The answer to the first question can be found in the literature on financial intermediation: due to information asymmetries and enforcement problems, candidate borrowers may be rationed out of credit. As to why suppliers should lend when banks cannot, Schwartz and Whitcomb (1979) have suggested that information relevant for credit assessment is a joint product of the process of sale. Suppliers are more prepared, the argument goes, to grant credit to their customers because they get to know them through repeated business interaction. Suppliers can also threaten to stop deliveries should clients fail to pay. To the extent that the client cannot easily and rapidly secure the same inputs from elsewhere, the threat will be effective in inducing payment.

In other circumstances, credit flows upstream instead of downstream, that is, from the client to the supplier in the form of advances or deposits. Client credit is seldom encountered in developed economies, except for large construction contracts or for large orders of custom-made goods (e.g., a ship). It is, however, frequent in the case of African microenterprises: many of them take advances from clients before beginning to work on their order (Cuevas et al. (1993); Fafchamps et al. (1994)). It has been argued that advances are a mean to reduce risk for the seller, in case the client were to renege on his order (Weston and Copeland (1986)). The advance is also a way of committing the buyer and of assessing his ability and willingness to pay for the good.

Trade credit is often combined with a cash discount for early payment. Information on cash discounts can be used to compute the implicit cost of supplier credit. Smith (1987) argues that trade credit operates like a screening

[6]Ironically, little evidence has been found of explicitly interlinked transactions in the places for which the theory was initially developed, namely, Third World villages. Interlinked transactions in the form of trade credit are extremely frequent in manufacturing and trade, however.

mechanism: by providing high cash discounts, suppliers can induce clients with high default risk to reveal themselves -- and thus take measure to protect nonsalvageable investments in buyers. Several authors have argued that a relationship exists between trade credit terms -- duration, implicit interest -- and macroeconomic shocks. Gamble (1993), for instance, argues that during recessions trade credit is reduced and more emphasis is put on in-house collection. Ramey (1992), on the other hand, insists that trade credit and money are negatively related because shocks to the cost of bank finance changes the price of bank transaction services relative to trade credit. Using a large firm data set from United Kingdom, Chiplin and Wright (1985) show that the relationship between money and trade credit is unclear. They find no evidence that tighter money leads to more generous trade credit.

Specified credit terms are not always complied with. Late payment of trade credit is indeed a frequent practice, so much so that corporate finance manuals customarily discuss various ways of keeping track of overdue credit, and argue about how to fine tune accounting computer programs so that they do not flag systematically all overdue debt but only those that should be acted upon (Johnson and Kallberg (1986); Weston and Copeland (1986)). The finance literature usually recommends a consistent and progressive approach to in-house collection (e.g., Hingston (1987)). In their effort to avoid bad debtors, providers of trade credit in industrialized countries rely on relationships to screen credit recipients (e.g., Schmidt and Berritt (1992)) and on legal guarantees like the promissory note (e.g., Schmidt (1991)) and the letter of credit (e.g., Rowe (1986), van der Toorn (1986)). Reputation with banks and suppliers is important in establishing and maintaining a credit rating (e.g., Walker (1985)). To minimize their exposure to credit risk, most firms set credit limits for each of their clients (e.g., Besley and Osteryoung (1985)). Chant and Walker (1988) present evidence supporting the view that the demand for trade credit is identical for small and large firms but the supply to small firms is smaller, indicating the presence of rationing motivated by credit risk considerations.

Section 2. The Conceptual Framework

At the end of this brief review of the literature, we are left with a large number of contractual issues having to do with commitment, information asymmetries, and transaction costs. We need a unified framework if we are going to successfully look at enterprise finance at the firm level. The organizing concept we propose here is that of contract enforcement. As it turns out, most information asymmetries and transaction cost issues that arise at the firm level can be shown to revert around it. We begin by drawing a typology of how economic agents can be induced to comply with contractual obligations.

Contract Enforcement

The starting point of our analysis is that contracts are not respected unless economic agents are able and willing to comply with their obligations.[7] Willingness to comply is assured only if an enforcement mechanism exists that penalizes breach of contract. Enforcement mechanisms come in three varieties: those based on guilt, those based on coercion, and those based on repeated interaction. Guilt is internal to each individual. One's ability to feel guilty for failing to respect business promises varies among individuals. Honesty is largely the byproduct of upbringing, what psychologists call 'secondary socialization' (Platteau (1994a, 1994b)). It is also influenced by cultural values and religious beliefs. Enforcement mechanisms that rely on coercion are of two types: legitimate and illegitimate. The legal enforcement of contracts through courts ultimately relies on the state's monopoly over legitimate force. It is the state's backing that allows creditors to seize a debtor's assets and thus grants collateral value to unmovable property. Illegitimate force can also be used to enforce contractual obligations. Parties may resort to insults and violence directly, or hire thugs and bribe policemen to intervene. In the great majority of cases, the actual use of force is not required; implicit or explicit threats are sufficient. Threats, however, are not always credible. Indeed, whether legitimate or illegitimate, the use of coercion to enforce contracts is costly. For small transactions, legal costs are typically too high to justify court action. Whenever the threat of coercion is not believable, it fails to induce compliance unless the offending party can be persuaded the aggrieved party will go to court or resort to violence even at a cost -- e.g., because she wishes to preserve a reputation of toughness (Kreps et al. (1982)) or because her moral sense compels her to do so.

[7]What McKinnon (1973) calls 'strategic default' and lawyers refer to as 'opportunistic breach of contract'.

The third type of enforcement mechanism is based on *quid pro quo*: 'I continue to behave if you continue to behave' (Axelrod (1984), Fudenberg and Maskin (1986)). It is the threat of retaliation that induces compliance with contractual obligations. For such a mechanism to work, parties must interact repeatedly over time. The simplest form of retaliation is the refusal to further transact (Eaton and Gersovitz (1981), Kletzer (1984), Grossman and van Huyck (1988)). For this punishment to deter breach, the relationship must be something worth preserving. Retaliation may also be inflicted by a group of people who were not party to the contract. Any group punishment requires a coordination mechanism and the circulation of information about contract compliance within the group (Kandori (1992), Raub and Weesie (1990)). Reputation is that coordination and information sharing device. Enforcement mechanisms based on reputation are vulnerable to disinformation: they do not operate well unless a complementary mechanism ensures the accuracy and veracity of the shared information.

These concepts are now illustrated formally. The less theoretically inclined reader may wish to skip the math and focus on the logic of the argument. Consider a contract by which an economic agent -- called the debtor -- promises to deliver a quantity f at time *1* to another agent -- called the creditor -- in exchange for a quantity k at time *0*. This definition includes pure credit *(*k and f money), trade credit *(*k good, f money), and advance payment *(*k money, f good). Placing an order with a supplier fits in this general form as well: k then represents the inventory cost saved by the supplier thanks to a better organization of production, and f is the inventory cost saved by the buyer thanks to timely availability of raw materials. Insurance and warranty can be accommodated by letting payment f be contingent on a commonly observable event. Parties value k and f differently so that potential gains from trade exist, i.e. the debtor likes to receive k more than paying or delivering f and vice versa.

The set of subgame perfect contracting equilibria -- i.e., of contractual promises backed by credible threats -- is derived by backward induction. At time *1*, the debtor decides whether or not to comply with the contract. The cost of complying in general varies with the debtor's type and unanticipated shocks. For instance, a highly competent craftsman (good type) will find it easier to deliver on time than an inexperienced craftsman (bad type). Similarly, a client may not pay because of cash flow problems (bad shock). The cost to the debtor of delivering f can thus be written as $\pi(-f, \tau, \epsilon)$ where τ denotes the debtor's type and ϵ denotes the state of nature at time *1*. Type $\tau \in \Delta$ is any characteristic of the debtor that is relevant to the contracting situation, like his or her professional experience, technology, preferences, and honesty. The state of nature $\epsilon \in \Sigma$ is any condition exogenous to the parties that was unknown at time *0* and makes contract compliance harder or easier. If compliance is totally impossible, we say that $\pi(-f, \tau, \epsilon')) = \infty$. How severely shocks affect debtors' ability to fulfill the contract in general depends on their type: those who are less competent or ill prepared have a high cost of compliance $\pi(-f, \tau, \epsilon)$ for many states of nature. The function $\pi(-f, \tau, \epsilon)$ allows for these effects as well. We assume that the sets of possible types Δ and states of nature Σ are common knowledge, but that only the debtor knows his or her type τ. Some shocks are observable *ex post* by both parties; others are privy to the debtor. As a result, the debtor has better information about ϵ than the creditor.

In case of breach of contract, the debtor receives a payoff of *0* but incurs punishment. We consider four types of punishments that correspond to the three categories discussed above: guilt, whose utility cost to the debtor is denoted $G(\tau, \epsilon)$; various forms of coercive action including harassment, threats, and court action, whose cost to the debtor is denoted $P(\tau, \epsilon, C)$; and two types of punishments based on repeated interaction: the suspension of future trade with the creditor resulting in the loss $EV(\epsilon, \tau)$; and damage to the debtor's reputation with other potential trading partners leading to a loss $EW(\epsilon, \tau)$. The $EV(\epsilon, \tau)$ term represents the expected discounted value of future transactions with the creditor; $EW(\epsilon, \tau)$ is the expected discounted value of future transactions with all those who will refuse to transact with the debtor after a breach has occurred. Penalties inflicted by each of the possible punishments depend on the debtor's type τ and on the realized state of nature ϵ. For instance, some agents are unscrupulous and have a low $G(\tau,\epsilon)$. Others are hard to harass and coerce into paying their debts through legal (or illegal) means and have a low $P(\tau, \epsilon, C)$, either because they have insufficient assets or cannot be traced. Others yet, like fly-by-night operators or firms on the verge of bankruptcy, have a short horizon and little interest in preserving their reputation -- low $EW(\tau, \epsilon)$ -- and their relationship with the creditor -- low $EV(\tau, \epsilon)$. All these effects are accounted for in equation (1). The strength of harassment and threats also depends on the form of the contract C, e.g. on whether formal guarantees were provided or whether contractual obligations were put down in writing to ease the burden of proof. If the cost of legal proceedings is high relative to the value of the transaction, the creditor cannot credibly threaten to sue and $P(\tau, \epsilon, C)$ is low. If the debtor cannot easily be sued or harassed because his address is not known or he lives far away, the threat of harassment may not be credible, in which case $P(\tau, \epsilon, C)$ is zero.

A rational debtor fulfills the contract if the cost of complying is smaller than all penalties combined:

$$(1) \qquad \pi(-f,\tau,\epsilon) \leq G(\tau,\epsilon)+P(\tau,\epsilon,C)+EV(\tau,\epsilon)+EW(\tau,\epsilon)$$

Whenever $\pi(-f, \tau, \epsilon')=\infty$ the debtor is unable to comply and the contract is breached. There are also situations in which the debtor could in theory comply, that is, $\pi(-f, \tau, \epsilon)<\infty$ but equation (1) is not satisfied. The debtor is then said able but unwilling to pay.[8] By definition, debtor who is unable to pay is also unwilling to pay.

Now consider time *0*. The creditor is asked to part with k in exchange for a future promise of f. Let $\Pi(-k)$ and $\Pi(f)$ be the value of f and k to the creditor. By assumption, there are gains from trade: $\Pi(f) > \Pi(-k)$. In forming beliefs about the likelihood of receiving f, a rational creditor evaluates the chances of being paid, i.e., the probability that equation (1) will be satisfied. In evaluating this probability, the creditor uses all the information, denoted Ω, available at time *0:* prior knowledge about the distribution of potential debtor types, information gathered over time through direct interaction with the debtor, and information conveyed by others about the debtor. Formally, let $F(\tau, \epsilon| \Omega)$ be the joint cumulative distribution over τ and ϵ that captures the creditor's beliefs given information Ω. Rank states of the world so that, for any debtor type τ, $\pi(-f,\tau,\epsilon)$ is decreasing in ϵ: it is easier to comply in good states. Further assume that each of the four penalties listed in equation (1) is non-decreasing in ϵ, i.e., that the debtor has more to lose in good than in bad states. We can then define the function $h(\tau)$ as the level of shock ϵ at which equation (1) is exactly satisfied and a debtor of type τ is just indifferent between compliance and breach, i.e. $h(\tau) = \epsilon^*$ such that:

$$pih(\tau) \equiv \epsilon^* \ such \ that \ \pi(-f,\tau,\epsilon^*)=G(\tau,\epsilon^*)+P(\tau,\epsilon^*,C)+EV(\tau,\epsilon^*)+EW(\tau,\epsilon^*)$$

For notational simplicity, let us ignore the possibility of partial payment. Then, for any shock ϵ above $h(\tau)$ the debtor pays; for any shock below $h(\tau)$ no payment is made. Let $(\underline{\tau}, \overline{\tau})$ and $(\underline{\epsilon}, \overline{\epsilon})$ be the lowest and highest values that τ and ϵ can take. A rational creditor agrees to a contract *(k, f)* if and only if what he or she expects to receive is greater than what is given, i.e., if:

$$(2) \qquad E(\Pi(f)|\Omega) = \Pi(f) \ Prob(payment) = \Pi(f) \int_{\underline{\tau}}^{\overline{\tau}} \int_{h(\tau)}^{\overline{\epsilon}} dF(\tau, \epsilon| \Omega) \geq \Pi(k)$$

Equation (2) can be understood as follows. If the debtor's type were known to be, say, τ', the probability of being paid would be equal to the probability that the exogenous shock ϵ is greater than $h(\tau')$, i.e., to $\int_{h(\tau')}^{\overline{\epsilon}} dF(\epsilon, \tau'|\Omega)$. Since the creditor does not know the debtor's type, however, the probability of being paid must be computed over all possible types, hence the double integral in equation (2).

The creditor may be able to affect the probability of repayment by affecting the form C of the contract. For instance, the creditor may request that the debtor mortgages real assets to service the debt in case the debtor goes bankrupt. Arranging legal security is costly and time consuming, however. Say there are N possible forms the contract $P(\tau, \epsilon, C)_n$ can take, each with its own cost $B_{nP}(\tau, \epsilon, C)$. The creditor then must choose a contractual form $P(\tau, \epsilon, C)_n$ such that the value of the transaction net of transaction cost $E(\Pi(f)|\Omega) - \Pi(k) - B_n$ is maximized. The solution to this optimization problem may be to bypass formal guarantees if contract enforcement mechanisms other than $P(\tau, \epsilon, C)$ are sufficient. Because commercial transactions can typically be enforced through repeated interaction -- i.e., through $EV(\epsilon, \tau)$ and $EW(\epsilon, \tau)$ -- alone, one expects them to make little or no use of formal guarantees and of the court system. Similarly, one expects legal institutions providing a lot of security at a high cost $B_{nP}(\tau, \epsilon, C)$ to be most relevant for large anonymous transactions. There may also be situations in which, for all possible contractual

[8]The distinction between inability and unwillingness to repay is blurred in practice. For equity reasons, debtors often are regarded as unable to repay when compliance would be unduly costly, i.e., when $\pi(-f, \tau, \epsilon)$ falls below a socially unacceptable level $B<\infty$.

forms $P(\tau,\ \epsilon,\ C)_n$ the net value of the transaction is negative. In those cases, the creditor refuses to trade. Imperfect enforcement then results in rationing. Small transactions, for instance, are difficult to enforce through courts and, if they are anonymous, cannot rely much on expected future trade. As a result, one expects small anonymous transactions to be self-liquidating, with immediate cash payment and no delayed obligations.

The debtor also must agree with the contract *ex ante*. A rational debtor will do so if and only if he or she expects to derive a benefit from the contract. The debtor knows his or her type, say, τ'. Let then $\pi(k,\tau')$ denote the value of receiving k for the debtor and, for notational simplicity, ignore partial payments. In period *1*, either the debtor pays and incurs a cost $\pi(-f,\ \tau,',\ \epsilon)$, or does not pay and incurs the punishments in equation (1). Given the debtor's type, payment occurs with probability $\int_{h(\tau')}^{\overline{\epsilon}} dF(\tau',\ eepsilon|\ \tau'\Omega)$. The debtor therefore agrees to the contract if and only if:

$$(3)\qquad \pi(k,\tau') \geq \int_{h(\tau')}^{\overline{\epsilon}} \pi(-f,\ \tau',\ \epsilon)dF(\epsilon|\tau') + \int_{\underline{\epsilon}}^{h(\tau')} [G(\tau',\epsilon)+P(\tau',\epsilon,C)+EV(\tau',\epsilon)+EW(\tau',\epsilon)]dF(\epsilon|\tau')$$

Equation (3) states that the debtor's gain from the contract (first term) must be greater than the expected cost of complying when compliance occurs (second term) plus the expected cost of punishment when compliance does not occur (third term).

Equations (2) and (3) illustrate the tension inherent to any contract. If enforcement is too lenient, debtors will promise anything knowing that if they breach their promise, they will not be penalized. At the limit, if enforcement is zero, $h(\tau) = eoverline\epsilon$, the creditor expects no payment at all and no contract is concluded. Similarly, if enforcement is very harsh and even the best debtors are occasionally unable to comply, then the expected cost of punishment $C_n{}^{-\infty}$ is larger than the gain from any contract. As a result, the debtor refuses to promise something he or she is not sure to deliver. In both cases, no contract is concluded even though there may be significant gains from trade. For trade to occur, enforcement must be sufficiently strong to deter opportunistic breaches but not so strong that it scares away all potential debtors (see Zame (1993) for a similar argument).

Adverse Selection, Statistical Discrimination, and Moral Hazard

Equations (1), (2) and (3) raise a wide range of information and incentive issues, many of which have been analyzed in the economic literature on contracts.[9] We briefly discuss a few results from that literature that are most relevant here, beginning with adverse selection. Potential debtors differ in how likely they are to comply with a particular contract. Whenever their characteristics cannot be readily assessed, the potential for adverse selection arises: debtors of the wrong type may assume contractual obligations knowing that they are unlikely to satisfy them but cannot be forced to comply. As a result, creditors may refuse to contract even at terms (trade credit, delivery date, promised quality) that appear very favorable because they fear attracting bad types. Business-like transactions will then be rationed (Stiglitz and Weiss (1981)). Evidence of rationing is expected to take various forms: certain clients will get turned down for credit, others will not be able to place orders without paying a deposit, certain people will not be allowed to pay by check, and payment will be made to some suppliers only after the goods they delivered have been thoroughly inspected. Rationing can occur even in the absence of asymmetric information: firms may refuse to contract not because they do not know the other party's type, but because they know too well that the other party is not reliable.

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[9]Readers unfamiliar with the literature on contracts may refer to Hart and Holmstrom (1987) and Kreps (1990) for a survey. Moral hazard refers to a situation in which one party to a contract, called the principal, cannot observe the action of the other party, called the agent. As a result, the agent is tempted to cheat the principal and must be given incentives to exert proper care. Adverse selection refers to a different situation in which it is the type of the agent that is not observable by the principal. An undifferentiated contract may then attract the wrong types of agents. A possible solution is for the principal to offer a menu of contracts and hope that agents of different types select themselves into different contracts. Alternatively, the principal may elect to ration supply and refuse to transact at certain terms. Singh (1989) presents two simple models of sharecropping, one with moral hazard, the other with adverse selection. These concepts have been extended in a variety of directions, generating an enormous literature that it would be too fastidious to summarize here.

Rationing is not the only possible response to the dangers of adverse selection: investigating the other party's type is another. Here, our framework becomes particularly useful because it makes predictions as to the type of information economic agents will collect on each other. Firms will want to know whether trade partners are competent in their business, an indicator that they will be able to repay. Firms will wish to know whether trade partners are committed to their business and interested in establishing a long term relationship. This can be achieved, for instance, by observing the other firm's pattern of purchases or sales over a period of time. They may also ask around if the other party has been in business for long and, if yes, whether other firms have encountered problems with that party. They will want to find out if trade partners are honest, for example, by selling small amounts on credit or placing small orders to test them. Firms may wish to know if the other party has a house or a permanent workshop, if it can easily be traced, if their spouse has a steady job, and other ways by which harassment and legal pressure can be brought to bear. They may even socialize with each other to get to know the other party better and keep abreast of how their business is doing.

Collecting information on potential trading partners, however, is costly. To economize on screening costs, firms may simply infer each other's type from easily observable characteristics like sex, race, or ethnicity. Small differences in average type across populations with different observable characteristics can then lead to statistical discrimination (Coate and Loury (1993). To see why, say, for instance, that many members of a particular group are familiar with a certain trade. Now suppose a member of that group is offered the choice to do business with an unknown member of the group or with an outsider. The transaction is small, so it is not worthwhile to spend resources investigating the other party. But because of differences in population averages, chances are the insider knows more about the trade than the outsider. It is then safer to deal with the insider. Statistical discrimination can thus, in the long run, induce the monopoly of a group over a particular sector of activity (Macharia (1988), Fafchamps et. al. (1994)). In anticipation of statistical discrimination, debtors may even seek to artificially differentiate themselves by acquiring a costly signal that is correlated with their true type τ. For instance, they may join a religious group simply to persuade creditors that they have a heightened moral sense and business probity (Cohen (1969), Geertz, Geertz, and Rosen (1979)). Although it is perilous to interpret people's religious motives, there is some evidence that Islam indeed penetrated Africa in this manner (Ensminger (1992)).

Moral hazard is another type of incentive problem that is likely to occur in commercial contracts. Success in business is influenced by the diligence and care with which firms conduct their operations. A debtor's ability to pay or deliver *f* typically depends on what the debtor does after having received *k*. Moral hazard can arise even if the creditor perfectly observes the actions of the debtor. The fact that a contract is not perfectly and costlessly enforceable is sufficient. Moral hazard can be formally captured by making the realized state of nature ϵ depend on an action *a* taken by the debtor between time *0* and time *1*, and by making the debtor's payoff depend negatively on *a*. In this situation, the debtor must be given incentives to apply proper care and effort (e.g., Stiglitz (1974)). In commercial contracts, the most common form of incentive is the implicit promise of continued transactions as long as performance is satisfactory and foul play is not suspected (e.g., Laffont and Tirole (1988)). From the point of view of the creditor, it is hard to disentangle (and largely irrelevant) whether breach of contract occurs because the other party is basically incompetent or does not apply enough care. In practice, therefore, moral hazard gets mingled with the other party's type.

Whether or not the creditor should spend resources monitoring the debtor's actions depends on details of the transaction that are not formally captured in equations (1) to (3). Our framework nevertheless provides insights as to when monitoring may be useful. For instance, realizing early on that a debtor is facing difficulties often enables the creditor to take conservative measures that increase expected repayment. This is particularly true for large loans secured by assets that could be dilapidated should the debtor go bankrupt, or when acting early enables one creditor to get ahead of others. Given the costs involved, however, continuous monitoring is probably not profitable for small, repeated commercial transactions; *ex post* monitoring is more likely. To this issue we now turn.

Excusable Breach, Risk Sharing and Implicit Contracts

Because of moral hazard and adverse selection, the boundary between inability and unwillingness to comply with contractual obligations, while somewhat precise *ex post*, is blurred *ex ante*: a debtor may be unable to comply because she promised something she could not deliver or was careless in executing the contract. Using harsh punishments can deter bad types from making empty promises and provide debtors with incentives to exert proper care and effort. But, as we have argued earlier, punishments that are too harsh also discourage *bona fide* parties who cannot

be totally sure they can honor the contract. Extreme sanctions get rid of moral hazard and adverse selection altogether; but they also eliminate *bona fide* trade.

To discourage opportunistic behavior while allowing enough flexibility for *bona fide* trade, creditors should assess whether breach of contract was due to unanticipated events or to carelessness and incompetence. If it appears the debtor was at fault (insufficient effort) or incompetent (bad type) the creditor may decide to terminate the relationship and seek reparation. On the other hand, if breach was due to events beyond the control of the parties, the creditor may prefer to excuse the debtor, renegotiate the contract and continue the relationship. Making punishment depend on the cause of breach improves efficiency because it deters opportunistic behavior but allows excusable default.

Businesses around the world, but particularly in Africa, are subject to shocks (Steel and Webster (1991), Little, Mazumdar and Page (1987), Cortes, Berry and Ishaq (1987)). Cash flows vary in unpredictable ways. Firms with insufficient access to insurance and credit from other sources often find themselves unable to honor precise deadlines for payment and delivery (Stone, Levy, and Paredes (1992)). Too strict a stance on contract enforcement is particularly counterproductive when all *bone fide* firms have recurrent difficulties fulfilling their contractual obligations. One would therefore expect a lot of contractual flexibility in high risk environments. Allowing excusable default is then a way of sharing risk among firms.

From a theoretical point of view, there are several ways in which risk sharing can be incorporated in business transactions. One way is to assume parties write explicit state-contingent contracts in which payment varies with the state of the world ϵ (e.g., Eaton and Gersovitz (1981), Kletzer (1984), Grossman and van Huyck (1988), Udry (1990)). In practice, such contracts are too cumbersome to be practical. Furthermore, ϵ is seldom observed perfectly by the creditor and is rarely observable by judges. Parties are therefore likely to opt for other solutions. One is to leave the contract deliberately 'incomplete' in the sense of Hart and Holmstrom (1987), for instance by stating that the debtor will pay 'when he can'. Enforcement then relies on the force of the relationship: as long as payment delays are reasonable, parties continue their relationship; when the creditor suspects foul play, the relationship ends. Another way to share risk is to specify fully the respective obligations of the parties, but implicitly agree that these obligations can be renegotiated in good faith should one party find compliance unexpectedly difficult and costly. The advantage of the third approach over the second is that contracts with clearly specified obligations are easier to argue in court. Explicit contractual obligations can then be seen as a way to influence the bargaining power of each party during the renegotiation process, and thus the functioning of the underlying implicit contract.

To distinguish between excusable and non-excusable default, creditors must in particular be able to infer ϵ otherwise any recalcitrant debtor could falsely pretend to be unable to pay. Costly monitoring of ϵ and a is often required for risk sharing to take place (Townsend (1979)). Relative performance can also be used to assess the likelihood that the debtor is telling the truth and worked hard enough (Radner (1985)). If ϵ and a are observed indirectly or with a delay, misrepresentation and carelessness can be deterred by increasing the severity of the punishment once cheating is suspected. Finally, false claims and insufficient effort can be discouraged by limiting the number of times the creditor is prepared to be patient. The debtor is like the little shepherd of the story: if he cries 'wolf' too many times, when the wolf is really there, nobody will come to help.

Trust and Reputation

Not only is the promise of future transactions an important incentive for contract compliance, repeated interaction also plays an important role in screening and monitoring. As economic agents learn about each other and revise their prior knowledge Ω, they come to trust each other (Gambetta (1988)). Trust can thus be thought of as a form of social capital: it accumulates through 'good' actions and dissipates through 'bad' actions (Coleman (1988)). The importance of trust in business leads to personalized transactions. To see why, consider a risk averse firm that has identified a few reliable business partners. The information Ω the firm has begun accumulating on its partners is more precise than Δ, the information it has on the general population of potential trading partners. Reliable partners are also probably better than the average population Δ because they are the result of a selection process. Therefore Ω stochastically dominate Δ: because the firm is risk averse, it prefers to deal with known partners than with unknown firms (Arrow (1971)). As the firm continues to trade with the same partners, it collects more information about them, which makes it even more likely to deal with them in the future. Trust-based exchange is thus self-reinforcing and favors the establishment of fairly rigid business networks (Meillassoux (1971)). The reluctance to deal with newcomers in the same way (trade credit, checks, orders) as old partners stifles firm entry and competition (Lorenz (1988)).

There exist two types of contract enforcement mechanisms that eliminate the need for personalized relationships: legal enforcement, and reputation. Both enable firms to operate within a large group and to rapidly establish business relations with new partners. Thanks to legal institutions, security can be found in unmovable collateral and other formal guarantees without prior acquaintance. Collateral-based enforcement is particularly important for large transactions like bank loans. Even banks, however, seldom rely exclusively on collateral and often seek to assess the trustworthiness of potential borrowers. Reputation is a form of social collateral that can guarantee contract performance without prior acquaintance. Economic agents who belong to an information sharing group may rely each on other's reputation when initiating business contacts. Reputable firms have a high $EW(\tau, \epsilon)$ with all the firms in that group, irrespective of whether they have dealt with them in the past or not. Concern for one's reputation may be sufficient to ensure compliance and to enable firms to offer credit or take large orders without knowing each other personally (Greif (1993), Milgrom, North and Weingast (1991)). Firms within an information sharing group are at an advantage relative to firms who outside of it because they can reach further, expand faster, and spread risk more easily (Fafchamps et. al. (1994)). The larger the group among which reputation is shared, the larger the group of potential business partners, and the more access firms have to a safe business environment.

Section 3. Implications for Empirical Research

We have covered a lot of ground in this chapter, drawing from literatures as varied as corporate finance, sociology, game theory and development economics. The rich and complex picture of enterprise finance that emerges from the exercise is one in which information and enforcement issues get irretrievably entangled, reliability and reputation are the avenue to success, legal institutions and ethnic prejudice combine to favor or penalize certain groups, and repeated interaction enable parties to legal contracts to implicitly agree to renegotiate their obligations *ex post*. In spite of its complexity and richness, however, the literature enables us to make certain predictions that we can compare to the reality of enterprise finance in Zimbabwe. At the core of these predictions lie a few key features of financial transactions, namely:

- the presence of risk, making fulfillment of contractual obligations in *all* circumstances difficult if not impossible;
- asymmetric information about borrowers' characteristics leading to adverse selection;
- asymmetric information about borrowers' action leading to moral hazard;
- transaction costs in screening, monitoring and collecting loans;
- repeated interaction that creates the possibility of trust and reputation as enforcement devices;
- the existence of a legal system that is costly to use and relies heavily on collateral to enforce repayment.

These features lead to a number of theoretical predictions that are now briefly summarized.

Credit Rationing

The theory predicts that no credit will be offered if the maximum that the debtor can credibly be forced to repay is smaller than the opportunity cost of money to the lender, subject to the borrower accepting the contract (equations 2 and 3). Without enforcement at all, no credit is given and there is full rationing. Even when credit is granted, lenders limit the size of their lending to what they can credibly recover from a borrower. Several factors increase the likelihood of rationing, including:

Low ability to enforce repayment. A poorly functioning legal system and the lack of reputation mechanism lower credible sanctions for breach of contract and increases the chances of credit rationing. In the absence of other enforcement mechanism, high cost of court action leads to the rationing of small credit transactions and of loans to small borrowers with few assets to seize -- e.g., microenterprises. Collateral may be required to get credit.

Statistical differences across borrowers' categories. Firms that belong to categories of borrowers with lower probability of repayment are likely to be the subject of statistical discrimination on the part of lenders and thus more likely either to pay higher interest rate or to be turned down for credit. This process may be self-fulfilling because lack of access to credit makes a borrower more likely to breach a loan contract following

a temporary liquidity problem. Firms most likely to be negatively affected are microenterprises and groups victim of prejudice -- e.g., blacks or women.

Greater uncertainty about borrowers' types. Firms that belong to categories with higher variance in experience, competence, and preferences are more risky and thus more likely to be turned down for credit, unless the borrower is able and willing to assess the borrower's type more precisely. This increases the likelihood that start-ups will be credit rationed. The same argument applies to firms who wish to expand beyond their traditional activities.

High costs of screening loan applicants and monitoring their actions. If screening costs are more or less constant per borrower, loans to small borrowers -- e.g., microenterprises -- are less likely to take place. Banks are more likely to ration loans than suppliers and friends because banks are less able to screen and monitor. Poor information networks increase screening and monitoring costs and are expected to lead to more credit rationing. Lenders with a choice between known and unknown firms will prefer the former. Economic agents who are costly to screen for a particular lender find it hard to borrow from that lender. Therefore, start-ups and ill-connected firms -- e.g., most Black firms in Zimbabwe -- are more likely to be turned down for credit. Small, anonymous transaction will typically be self-liquidating, i.e. with instantaneous payment and no credit.

Greater dependence of contractual performance on borrower's type and effort. If the outcome of the transaction depends critically on the borrower's effort, the latter may be required to share the risk of the operation, through equity participation for instance. Loan rationing then takes the form of a debt-equity ratio and limited loan size. Credit rationing is thus more likely for expansion projects where effort and competence of entrepreneur are critical. Fast-growing firms are likely to be most affected by credit limits.

High opportunity cost of money. For a given set of enforcement mechanisms, tight money increases the cost of money to the lender without necessarily increasing the strength of enforcement penalties (see equation 2). High interest rate is therefore expected to lead to more conservative lending practice and more credit rationing.

Controlled interest rate. When interest rates are controlled, the lender may not be able to cover for lending risk. Lender will then try to exclude risky types from receiving loans. If lenders are forced to allocate part of their loan portfolio to risky types, and there is excess demand for loans, rationing takes the form of a lottery or a queue. Parties may resort to corruption in a effort to affect the allocation of loans.

Contractual Flexibility and Self-Rationing

Firms may decide not to borrow if they are uncertain regarding their ability to comply with contractual obligations and if the costs of default -- guilt, loss of reputation, loss of relationship, and legal action -- are too high. In this case we say that there is self-rationing. Self-rationing may be present even if the expected return on borrowed funds is high. Like direct rationing, self-rationing is thus potentially welfare reducing. Self-rationing is most likely when:

- uncertainty is high for the debtor;
- uncertainty is largely beyond the control of debtors;
- debtors are risk averse;
- legal enforcement of contracts is inflexible and the interpretation of contracts is literal;
- the reputation of the debtor is at risk;
- the relationship with the lender is worth preserving.

Self-rationed firms are most likely to be found among small proprietors who fear losing the few assets they own (e.g., family home or farm) and among firm owners who cannot shelter their private assets from creditors (e.g., sole proprietors). Self-rationing is reduced if borrowers agree to enforce contracts in a flexible manner. Flexibility is often required for exchange to take place at all. Defaults and delays in payment therefore occur. Even though not welcome, they are anticipated to happen with some probability. The more risky the environment is, the more flexible

enforcement should be. Flexibility is therefore likely to be more important in sectors and economies with a lot of risk. But flexible enforcement encourages moral hazard and adverse selection. Creditors are therefore least likely to be flexible when:

- debtors' actions and types have a large effect on the outcome of the transaction;
- screening the debtor's type is difficult;
- monitoring of debtor's actions is difficult.

As a result, self-rationing may be more important among firms who expects their creditors to show little flexibility, like start-ups and ill-connected firms.

Interest Rate and Debt Horizon

As is evident from equation (2), lenders can, up to a point, compensate for higher default risk by raising the interest rate. Factors that lead to credit rationing when they are strong lead to high interest rates when they are weak. Consequently, microenterprises, black businesses and start-ups who are able to secure credit are expected to pay higher interest rates. Differences in screening, monitoring and collateral costs are also partly reflected in variations in interest rate by loan size, loan type, and borrower type.

Monitoring is a means of addressing concerns about moral hazard. As a substitute for costly direct monitoring, the debt horizon can be used to monitor performance indirectly: short term credit can be used for long term credit needs with the implicit understanding that credit is renewed as long as the borrower does not attempt to abuse the contract. This approach is most effective if combined with credit rationing because a bad borrower can then not escape the consequences of a damaged relationship. A dual credit market can serve a similar role of disciplining device: debtors who have failed to honor past transactions in the primary market have to borrow at higher rates in the secondary market.

The theory of adverse selection further predicts that when lenders cannot differentiate among borrowers, they may, as a group, offer a menu of debt contracts to cause borrowers to self-select according to their type. Lenders then offer not a single undifferentiated financial instrument but rather a variety of instruments with different interest rate, repayment period, and legal securities. Least risky borrowers are predicted to select forms of finance with high collateral and low interest rates, while high risk borrowers select low collateral, high interest finance. Another way of inducing self-selection among borrowers is to restrict the use of each instrument to particular financial needs. For instance, credit for expansion may be delivered in the form of medium to long term loans and credit for working capital given in the form of flexible, short-term advances.

Screening, Monitoring and Reputation

As is well known, offering a menu of contracts generates a surplus for the types of borrowers who must self-reveal themselves. Lenders may economize on that surplus by directly collecting information about prospective borrowers. What lenders screen for depends on the type of enforcement mechanism they ultimately intend to rely on. Parties that rely on courts and legal securities screen for collateral. Legal institutions are thus most useful for large anonymous transactions. To the extent that harassment can be resorted to as a form of debt collection and *ex post* monitoring device, lenders may insist on knowing the borrower's address and whereabouts.

Repeated commercial interactions can also enforce contracts with little or no recourse to formal guarantees and courts. Parties to commercial transactions must then assess whether the debtor is a *bona fide* firm and is committed to maintaining a business relationship. To do so, they may test potential debtors over a period of time and visit their shop or factory. Commercial banks may similarly collect valuable information on their clients' business by monitoring their accounts. Suppliers collect valuation information by monitoring the pattern of their clients' purchases. In the absence of reputation mechanism, business transactions become heavily personalized; mutual trust must be established before contractual obligations are accepted. Groups of firms or individuals able to organize the truthful dissemination of contractual information are at an advantage relative to other firms or individuals. When the cost of collecting information on borrowers is large relative to the value of the transaction, statistical discrimination may be used instead of direct screening. This does not mean that discrimination along ethnic or gender lines is always a rational outcome; it may also result from ignorance and prejudice.

Equity

To access flexible funds, i.e., to share risk with financial investors, debtors may have to grant the owner of the funds management rights and let lenders monitor their actions closely. The theory therefore implies that firms will typically be requested to finance from equity part of all of major expansions and investment projects. Long-term lenders either insist on immovable collateral or take a close interest in the firm, for instance, through participation in its capital and direct monitoring of its activities.

Shareholders monitor the firm's management to minimize moral hazard. Monitoring can be done indirectly through the market, or directly through participation in the management of the firm. Monitoring by the market requires institutions to publicly verify the firm's accounts. Monitoring costs reduce the attractiveness of the stock market for small firms. To avoid the loss of control inherent to outside equity financing, most firms prefer relying on their own resources for expansion. Retained earnings are thus expected to play a major role in firm growth.

Competition on Financial Markets

Because of the existence of increasing returns to information, competition among lenders is expected to be imperfect. Lenders have a preference for exclusivity in lending (if they are banks) and trade credit (if they are suppliers) in order to facilitate monitoring. Given the existence of learning costs and other sunk costs in establishing new financial institutions, competition in financial markets is limited by the size of the market. Consequently, one expects different financial institutions to specialize in different categories of financial instruments. When the market for a certain type of financial instrument is too small to cover entry costs, financial institutions to offer it do not spontaneously emerge and that financial instrument is nonexistent. Imperfect competition in the provision of credit means that certain firms may be able to extract monopoly or oligopoly rents. Firms that are large enough to qualify for credit from different banks may have access to better interest rates.

The existence of institutions that spread accurate information about borrowers' past performance makes it easier for established firms with a good track record to access credit. It is in the joint interest of lenders to share information about their borrowers but against their individual interest if transmitting the information is costly and they can free ride the system. Armed with a deeper understanding of the nature of financial transactions, we are now ready to consider the available evidence on enterprise finance in Zimbabwe.

Chapter 3. Financial Institutions and Instruments

A proper understanding of enterprise finance cannot be achieved without first considering what financial services are available, in what form, and from what source. In this chapter we document the range of financial institutions and instruments currently available in Zimbabwe. We also describe the laws and administrative procedures that support credit transactions. At the end of the chapter we discuss the attitude of Zimbabwean banks toward business in general and manufacturing in particular. In the conclusion we compare the existing evidence with the theoretical predictions made in the previous chapter.

Section 1. Financial Institutions

The range and number of financial institutions operating in Zimbabwe is impressive by African or even developing countries standards. The financial sector consists of several layers of institutions: the Reserve Bank of Zimbabwe, commercial banks, merchant banks (also called accepting houses), finance houses, discount houses, building societies, institutional investors, development finance organizations, the Post Office Savings Bank, and the Stock Exchange. Financial activities are also assisted by credit insurance and credit reference institutions.

The financial institutions that lend directly to the public are comprised of five commercial banks (Barclays, Standard Chartered, Zimbank, Stanbic, and the Commercial Bank of Zimbabwe), four merchant banks (First Merchant Bank, Merchant Bank of Central Africa, Syfrets Merchant Bank, and National Merchant Bank), five finance houses (Stanbic Finance, Fincor, UDC, Standard Finance, and Scotfin), three building societies (Central African Building Society, Founders Building Society, Beverly Building Society), and two development finance institutions (the Small Enterprise Development Corporation or SEDCO, and the Zimbabwe Development Bank). The African Development Bank and the International Finance Corporation are also active in Zimbabwe. Commercial banks and accepting houses are part of the monetary banking sector. Finance houses and building societies raises funds through fixed term deposits. Development finance institutions are financed by the government and external donors. The Post Office Savings Bank takes deposits from the public but does not lend to the public. The government has a controlling interest in Zimbank and its subsidiaries, Syfrets and Scotfin, in the Commercial Bank, and in ZDB.

The main financial institutions and their relative market shares have changed little over the years (Figures 1 and 2). Three commercial banks, Barclays, Standard Chartered and Zimbank, dominate the scene in terms of the loans they make and the deposits they collect to and from the public. Merchant banks cater to the needs of large corporate clients. UDC and CABS are the main actors in their respective category. ANZ Grindlays was recently bought by Stanbic, a South African bank. The formerly Standard Chartered Merchant Bank has become the Corporate and Institutional Banking Division of the commercial bank by the same name. The National Merchant Bank is a new entrant geared primarily toward black businesses.

There are several investment institutions that can be used by manufacturers in raising venture capital. These include the Venture Capital Compaby of Zimbabwe, the Zimbabwe Development Corporation, the African Enterprise Fund, the Manna Corporation, and Hawk Ventures Ltd. In addition, there are several foreign institutions which do not have offices in Zimbabwe but offer equity finance for small enterprises in African countries. They are listed in the ZDB/CZI Handbook on Project Finance. Taken together, however, all these operations are rather small.

The secondary market for financial paper (or money market) is organized around three discount houses: Bard Discount House, Discount Company of Zimbabwe, and Intermarket Discount House, a recent entrant. The discount houses trade in banker's acceptances, negotiable certificates of deposit (NCDs), and government paper (Treasury bills and bonds, AMAs and municipal bonds). They rarely handle trade bills, but occasionally discount promissory notes directly from large corporations and holding companies. Traditionally, discount houses have exclusive access to the rediscounting window of the Reserve Bank of Zimbabwe.[10] The market for securities is organized around the six or so brokers who form the Zimbabwe Stock Exchange. The Stock Exchange has been in existence since 1973 but has

[10] According to one of the respondents, there was a recent attempt by the RBZ to open its window to financial institutions directly, but the RBZ could not handle the resulting flow of transactions.

recently become more active as a result of its mid-1993 opening to foreign investors (Figures 3, 4 and 5). There is no market for corporate bonds.

Apart from the already cited financial institutions, two other categories of actors are active participants in the secondary market for financial paper: institutional investors and the Reserve Bank of Zimbabwe. Institutional investors comprise about 50 insurance companies and over 1200 pension funds mostly interested in long term investments and naturally attracted by government bonds and, to a lesser extent, securities. Since the financial liberalization of the economy, open market operations by the Reserve Bank of Zimbabwe have become the major instrument of monetary policy. While we were in Harare the RBZ was quoting a discount rate on banker's acceptances of 30% but, in accordance to its tight money policy, it was not buying any; as a result, the money market rate was around 35%.

The financial sector is assisted in performing its function by credit insurance and credit information services. The Credit Guarantee Company (CGC), jointly owned by the RBZ and the five commercial banks, extends guarantees of up to 50% of the amount lent by a commercial bank for small projects. Credit Insurance Zimbabwe, a private company, offers a little used bank guarantee policy that covers up to 70% of the working capital advanced by banks to exporting firms. Credit reference information is collected and disseminated by Dun and Bradstreet Zimbabwe which keeps some 75,000 enterprises and 1,000,000 Zimbabweans on file. Through their Financial Clearing Bureau, banks share information about the opening and closing of accounts. Finance houses also share information about credit performance on hire-purchase agreements.

Section 2. Financial Instruments

The range of financial instruments available to Zimbabwean manufacturers is no less impressive than the list of financial institutions. Short-term finance is organized primarily around overdraft facilities and banker's acceptances, which taken together represent the bulk of lending by commercial banks to the manufacturing sector. Banker's acceptances presents the advantage that banks can use them to manage their day-to-day liquidity by discounting them on the money market. The discounting of trade bills, on the other hand, is little used. Short-term off-shore finance can be organized by merchant banks for importers or exporters. At the time of our visit, interest rates on off-shore financing reverted around 8% (LIBOR + 2%), versus 35% on domestic short-term finance. Borrowing off-shore, however, implies a significant foreign exchange risk. This risk is mitigated when repayment of the loan is covered by anticipated export proceeds. The interest rate differential thus operates as a (moderate) incentive to export. Off-shore loans are only available in major currencies, not in South African Rands, presumably because credit is available from South African exporters directly. Full factoring can be arranged with UDC, a finance house, or with its smaller competitor, the Credit Finance Corporation. Several of the manufacturers we spoke to use factoring as a source of working capital.

Medium-term finance is available in various forms. The purchase of vehicles and equipment can be financed by finance houses through hire-purchase or financial leasing. Retailers also sell furniture on hire-purchase. SEDCO gives out medium-term loans to small enterprises and start-ups for working capital (up to 3 years), equipment (up to 5 years) and buildings (up to 10 years). Finance houses like UDC offer medium-term loans of up to five years. The funds for these loans come from foreign lines of credit earmarked for particular purposes. These facilities were covered against foreign exchange risk by RBZ and thus present little risk for borrowers. Since RBZ has discontinued its foreign exchange coverage at the end of 1993, however, future lines of credit of this type may subject borrowers to substantial foreign exchange risk.

Medium-term off-shore finance can also be organized via merchant banks. For large amounts, Zimbabwe banks seek the support of export credit guarantee schemes from European and U.S. government. With the guarantee in hand they then approach commercial banks in the country from which supplies and equipment are originating. For small amounts, merchant banks negotiate directly with off-shore banks. The payment of loan installments is organized by letter of credit. Zimbabwe commercial banks occasionally extend medium-term finance in the form of banker's acceptances for 360 days, loan facilities, of individual loans. At the time of our visit, however, commercial banks appeared retrenching from any lending beyond 90 days. It is, however, customary for firms to finance small purchases of equipment and machinery with short-term finance. Although commercial banks are in principle opposed to the use of short-term facilities to finance anything else than working capital, in practice they seldom often complain as long as equipment purchases do not reduce the range of fluctuations on the overdraft. Whenever a situation develops in which the overdraft no longer falls below a given level, commercial banks reduce the overdraft and convert the hard-

core into a two to five year loan to be repaid by. Several of the manufacturing firms we interviewed had, at some time or another, a portion of their overdraft turned into a loan.

The range of instruments for long-term finance is more limited. Thirty year loans guaranteed by mortgages can be organized with building societies or pension funds but primarily for the purchase of land or the construction of buildings. Project financing is available through merchant banks for large corporate clients, and through development banks like SEDCO, ZDB, ADB or IFC. Loans from the two latter sources often are denominated in foreign exchange. This imposes a significant foreign exchange risk on investors, as the recent history of certain large Zimbabwe manufacturers has amply demonstrated. Other types of long term loans are rare if not nonexistent. Commercial banks are not involved in long term lending at all. Corporate bonds are not used.

Equity finance is increasingly perceived as a viable alternative to loans and is rapidly becoming a popular source of long term funds for the largest of the Zimbabwean companies. Since the early 1990s, and particularly since the opening of the Stock Market to foreign investors in mid-1993, rights issues have been used for financing expansion projects or cleaning balance sheets. Underwriting services are provided by merchant banks. The absorption capacity of the market is small compared with firms' desire to float new stock. To prevent a collapse of share values, the Stock Exchange currently holds a one year waiting list for new flotations. For those firms too small to go public, venture capital is available from various sources. Securing funds from a venture capitalist, however, limits one's freedom of movement: equity investors typically insists on monitoring closely all the activities of the firm. Another possible source of equity finance is development banks, but it usually comes packaged with long term loans. Commercial banks in Zimbabwe are not involved in equity financing. The only time they may hold equity is when a client defaults on a loan and they accept to swap debt for equity. Derivatives are currently not used and thus not traded in Zimbabwe, but they are being actively investigated.

Credit insurance is available to private firms through the Credit Insurance of Zimbabwe. Two types of risks are covered: commercial risk of non-payment by domestic clients; and political and commercial risk of non-payment by offshore buyers. CIZ also assists its customers with debt collection. Credit guarantees for bankers are available through the Credit Guarantee Company and, to a much smaller extent, through CIZ as well. Dun and Bradstreet disseminates credit reference information about Zimbabwean firms and individuals. Its publications include new registrations of firms with the Registrar of Companies, court judgements passed against firms and individuals, and credit ratings based partly on publicly available information and partly on information collected and held in confidentiality by D&B. Debt collection services are available through D&B and various lawyers offices. Assistance in drawing loan applications is available through SEDCO and the Small Business Units opened recently by the main Commercial banks.

Section 3. Legal Issues

Commercial contracts in Zimbabwe are ruled by Dutch Roman Law. Jurisprudence is shared with South Africa. We briefly describe the forms of direct and indirect security available in Zimbabwe as well as existing debt collection procedures and practices.

Forms of Security

The principal forms of direct security include deed of hypothecation, notarial bond, negative pledge, ownership of movables, frozen deposits, assignment or cession of receivables, and third-party guarantee. The most common and preferred form of collateral on bank loans and overdrafts is the deed of hypothecation, a form of floating mortgage. The deed is registered to prevent conflicting claims. It can only be taken on immovable property. The opening of a deed of hypothecation implies the transfer of the land title to the lender. Many Zimbabweans, mostly in communal areas and townships, do no possess a title on their land, either because they live in areas where the acquisition of a title is discouraged (if not illegal), or because they have not paid the relatively large fees required to obtain a title. The absence of land titles is perceived as an acute constraint to expansion in growth points especially. The reason for the current state of affairs seems to reside in the small number of qualified surveyors available. A significant land surveying effort is indeed before titles can be granted in the many parts of the country recently chosen by the government as growth poles.

On movable assets, the most frequent form of security is the notarial bond. A general covering notarial bond encompasses all items belonging to a particular category, e.g., stocks or equipment. A notarial bond can also be taken on a particular item, in which case the item must be precisely identified in the contract. Unlike a chattel mortgage,

a notarial bond does not allow its holder to recover items from the hands of someone who has bought them from the borrower. If a delinquent borrower liquidates his or her assets, it only constitutes a breach of contract with the lender. All what a notarial bond does is to grant seniority over other creditors. Zimbabwean banks and finance houses are currently seeking to prevent borrowers from granting competing general coverage bonds by instituting a registrar of notarial bonds. Related to the notarial bond is the negative pledge. In this case, the borrower pledges not to give a senior claim on its assets to any other creditor. Failure to do so, however, only constitutes a breach of contract. Upon catching a debtor reneging on a negative pledge in bad faith, banks may call all his debt.

Movable items provide a more effective security when the lender retains ownership until payment is completed. This is the form of security on which hire-purchase and financial lease contracts are based. As we have seen, hire-purchase is a major source of medium-term credit for the purchase of vehicles and equipment. Hire-purchase agreements fall under the Hire-Purchase Act and, as such, as subject to a number of restrictions regarding down payment (40%) and duration (3 years). These restrictions were instituted primarily to protect final consumers; they are less relevant for commercial borrowers. To circumvent these restrictions, lenders have begun experimenting with financial lease agreements. At the time we visited Zimbabwe, the cost effectiveness of such arrangements was constrained by tax laws which *de facto* imply the double imposition of the residual value of the item at the end of the lease. Repossessed vehicles and equipment are publicly auctioned in an active secondary market. The existence of an auction market raises the expected value of repossessed items and enhances their collateral value.

Financial deposits in other institutions can be used to secure a loan. The institution in which the deposit is held is then required to request the lender's approval before releasing funds to the borrower. Financial institutions in Zimbabwe cooperate in ensuring the respect of such obligations. A borrower can also assign its own debtors (i.e. pledge its receivables) as guarantee for a bank loan. Ceding one's debtors (i.e. the sale of receivables) is the legal basis on which factoring contracts are organized. As we mentioned earlier, third-party guarantees by CGC or CIZ can be arranged as collateral substitute. Banks themselves are occasionally asked to guarantee the contractual obligations of their customers. A firm may, for instance, use a bank guarantee to secure credit from one of its suppliers. Bank guarantees are often required of applicants to public tenders.

Trade bills and checks offer some limited security. Bills of exchange guarantee limited seniority claims on the transacted goods. Checks offer no security but the bouncing of a check makes it easier to argue a case in court because it provides undisputable evidence of the existence of a legal claim. Trade bills, although little used, can in principle be discounted with commercial banks. Post-dated checks can be discounted at a high premium outside of the formal financial sector.

Beside the various forms of direct security that we just discussed, there exist several no less important institutionally supported indirect securities: business registration, credit reference, independent auditors, and criminal penalties for falsifying financial statements. In order to register their business, firms are required to provide important financial information, including the name and full address of the owners, the equity of the firm, a balance sheet, and other financial statements. This information is entered into the Registrar of Companies and made publicly available. The Registrar of Companies constitutes one of the major sources of information for credit reference bureaus like Dun and Bradstreet. Combining this information with court records and confidential information passed on by clients, D&B plays a crucial role in helping firms establish a highly visible and widely publicized track record. The wide use of D&B services in Zimbabwe ensures that debtors are incited to seek accommodation with their creditors. Indeed they know (or should know) that failing to do so could tarnish their reputation and seriously restrict their future access to credit from all sources. In addition to D&B, finance houses, banks, and retailers who sell on hire-purchase also share credit performance information among themselves.

The independent auditing of accounts by registered accountants is an important indirect form of security as well. It is sought by merchant banks, when in doubt, before extending project financing, and it is a crucial requirement before a firm is allowed to float securities. The Stock Market could probably not operate if firms' accounts were not independently verified by reliable auditors. Making it a criminal offense to falsify financial statements like historical balance sheets and management accounts also confers more value to these documents and enhances their use in screening and monitoring debtors. Group lending is a form of indirect security that is very little used in Zimbabwe. To our knowledge, only SEDCO has begun experimenting with group loans to selected microenterprises.

Debt Collection Procedures

The legal procedure for debt collection in Zimbabwe is quite straightforward. After a final demand by the creditor's lawyer, a summons is send to the debtor. Filing the summons with the court opens the case. The great bulk of non-payment commercial cases are uncontested, in which circumstance the judge immediately renders a judgement by default. With this judgement in hand, the messengers of the court are instructed by the sheriff to confiscate the debtor's assets. If the assets are not sufficient, the debtor may in principle be asked to go to prison, but such cases are rare. More likely, the threat of imprisonment may be waived in the hope of inciting the debtor to pay the remainder of the debt by installments. A bankrupt company can either be liquidated or put under judicial management. One person we spoke to lamented that Zimbabwe only has a small number of highly qualified judicial managers and deplored the absence of Chapter 11 type legislation. This person argued that these legal shortcomings force creditors to seek liquidation instead of attempting to rehabilitate the firm. Others were of the opinion that the current situation is satisfactory. Unlike during our visits to Ghana and Kenya, we heard no complaints that courts were corrupt or lenient. No one we spoke to said that judges have a tendency to side with debtors and make it easy for defendants to use delaying tactics, as was the case in Ghana. Delays, however, occur as a result of bureaucratic backlog.

Alternative debt collection procedures exist as well. They all ultimately rely on the threat of court action. Many lawyers and debt collection agencies offer themselves to mediate and arbitrate disputes. All judgements regarding the non-payment of commercial or consumer debt are immediately published in Dun's Gazette. Having one's name in the Gazette often trigger a withdrawal of all credit. As a result, a firm whose name has appeared in the Gazette may have to downside or even close down. The threat of a tarnished commercial reputation is a major incentive to come to terms with creditors, often even more so than the distant fear of confiscated assets.

Section 4. The Attitude of Financial Institutions

An introduction to financial institutions in Zimbabwe would not be complete without a sense of how they practice their business. As we have seen, financial institutions have set up and are benefiting from well established procedures for the sharing of credit performance information. The existence of such information sharing agreements have led some to accuse banks of forming a cartel. However frustrating it may be for someone in financial difficulty to discover that its conflict with one bank is immediately known to all the others, the sharing of credit performance *information per se* does not qualify as cartel behavior. In fact, according to some respondents, banks occasionally omit to reveal information about problematic customers in the hope that they will take their unwanted business elsewhere.

Formal channels of information sharing are complemented by the old boy (whites) and new boy (blacks) networks. Golf club tournaments and other sporting events offer an opportunity for business gossip to circulate among the happy few, the well connected. The top of the business hierarchy is but a little village where there are no secrets and everyone knows everyone else. This is the other track record, the race track. The existence of networks helps information about established businesses circulate, but it makes it difficult for new entrants. Getting known becomes yet another hurdle to get over. Furthermore, not all management and owners of small and medium firms are prominent figures on the golf course or the rugby club. The information on them conveyed by gossip alone is probably more tenuous, less reliable, less useful. As a result they may find it harder to qualify for credit. Banks, however, remain formally quite distinct from other business interests, in particular from the three main holding companies present in Zimbabwe. Zimbabwean banks do not in any way resemble keiretsus or German universal banks.

Another, more convincing way of looking at competition among financial institutions is to consider the quality and price of the service they offer and the available limited evidence on concentration. While the range of financial institutions and instruments offered in Zimbabwe is impressive by African standards, the number of institutions providing any category of services is very small. There is also a strong tendency for financial institutions to vertically integrate, i.e., to establish their own merchant bank and finance house, and to invest in discount houses and venture capital firms. Some respondents even accused the main banks of dividing up the market among themselves. One respondent in particular had it all figured out: Barclays, the respondent said, caters to the multinational Anglo-American companies, Standard Chartered to the commercial farmers, Zimbank to the parastatals, and Stanbic to South African multinationals. Of course we were unable to verify these allegations. What we could verify, however, (see Chapter 3) is that clients tend to stay with the same bank for a great number of years. The reason is that the high cost of establishing legal securities (i.e., deed of hypothecation, notarial bond, etc) makes it expensive to switch from one bank to another. This tends to restrict competition as firms find it difficult to arbitrage differences in prices and services among banks. Larger firms find it easier to shop around for rates and conditions because they often can raise money on their good name alone, and customarily maintain several channels of finance open at any one time.

As a result of the high degree of concentration and the apparent limited competition, one would expect the user price of financial services to be high. Commercial banks indeed have unusually high margins on foreign exchange transactions (up to 1% spread between the selling and buying prices for foreign currency according to a bank official, versus 0.05% in Europe) and large spreads between the cost at which they collect deposits and the rate they charge on their loans or get on the money market (up to 8% spread according to several bank officials). Figures 6 and 7 show how money market rates, which used to be below the interest banks paid on time deposits,[11] shot well above deposit rates after the financial liberalization in 1992 and have remained well above them ever since. Of course, the size of these spreads may only be temporary. After all interest rates and foreign exchange transactions were only liberalized recently. In time they may be competed out, as Figure 7 seems to suggest.

The number of services, although diversified by African standards, does not compare with the West either. The paucity of instruments for long term finance is particularly flagrant. But the limited range of services may be attributable to the straightjacket under which banks had to operate prior to the financial liberalization. The current trend among Zimbabwean banks is to rapidly expand the range of services they offer. Right now the emphasis is on collecting more deposits in order to take advantage of the interest rate spread. Given the high rates of interest, little is done to expand lending. The situation may change, we were told, if interest rates come down.

Can new entries challenge the status quo? A new merchant bank and a new discount house are now competing with existing institutions. ANZ Grindlays has been bought out by the South African bank Stanbic. According to some respondents, these new developments may be insufficient to force margins down. Stanbic, for instance, is at a disadvantage relative to the big three because it does not have a dense network of branches collecting deposits from the general public. As a result, it must finance part of its expansion effort by raising funds on the money market at prohibitive rates. The other new entrants are too small to shake up their respective markets. Besides, they are partly financed by existing financial institutions.

The possibility of entry by a major international bank was cited by many but not taken as a serious threat by bank management. First there is a legal issue: according to the old bank legislation, foreign banks are not allowed to enter the Zimbabwean market without setting up a network of branches in all parts of the country. This requirement has effectively worked to restrict entry. The rumor is, however, that the legislation is being amended and that the requirement has *de facto* been lifted. Some entry by international banks is therefore expected, but only at the corporate level. Such entry would not put pressure on the rate paid on deposits from the general public and thus would not threaten the interest rate spread. It may, over time, push the spread on foreign exchange transactions down. Bankers cite the difficulties faced by Stanbic in securing domestic funds at reasonable cost to shrug off fears of increased competition. The transformation of existing building societies into commercial banks may have more important effects. Indeed, building societies, CABS in particular, have been fairly successful in attracting deposits from the general public. The sleeping giant of the story, however, may well be the Post Office Savings Bank. The rate POSB pays on its time deposits pretty much determines the rate all others pay their depositors. It is, however, unlikely that POSB would wish to raise its rates too much: the funds it channels all go to help the Treasury. Raising the deposit rate would translate into a higher cost of funds for the government.

Bank conservatism is another frequent subject of complaint. In the case of Zimbabwe, bank conservatism cannot be blamed as an heritage of government interference in allocating funds across uses in a discretionary fashion. Zimbabwean banks make no secret that their primary responsibility is toward their shareholders and depositors. Bankers think safe profits first, an attitude that is reflected in the generally low levels of default (i.e., 2% on average). They tend to shy away from high costs, high risk borrowers, that is, from small firms, start-ups, rapidly expanding firms, and firms managed by inexperienced or unconnected blacks. Banks prefer large loans to established, profitable businesses: breweries, large distribution chains, mining ventures, tobacco traders, etc. Every banker's dream, for instance, is to lend to Delta, one of three major holding companies that has a 40% government participation. Since banks have easy access to safe investments with a high return, e.g., government bonds, AMAs, and NCDs, they see little point in taking risk.

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[11] We chose as benchmark for the deposit rate the interest rate paid by POSB on 12 months savings account. POSB is the main competitor of private banks in securing funds from the public. The rate, set by the government, that POSB pays to its depositors is a good proxy for what private banks must pay in order to attract deposits. This impression was confirmed during our interviews.

In the recent past, this cautious strategy has occasionally failed as a result of recent macroeconomic events. Banks lost money on a few large companies that were negatively affected by the structural adjustment program. They had to provision up to 10 to 20% of their outstanding loans in certain areas. Textile, the fastest growing manufacturing sector during the 1980s, was the worst hit. After this painful experience, certain banks appear to have decided to pull out of textile and garment indiscriminately. This movement has hurt garment manufacturers, even those who benefited from structural adjustment and are currently exporting abroad. It also appears that some of the funds that are channelled toward manufacturing do so for the wrong reason. One of the building societies, for instance, has increased its long-term mortgage-based lending to commercial enterprises simply because it is not subject to the cap set by the government on the interest on home mortgages. The move is seen as a temporary, necessary evil.

In their projections about the future, banks are looking more toward mining, tourism, and non-traditional agricultural exports (e.g., horticulture) for profitable loans. Given the currently prevailing high interest rates, banks see it as their duty to 'prevent people from getting into trouble'. Very few economic ventures, they argue, yield a nominal return of 40%. Encouraging loans in these conditions amounts to helping people hang themselves (and the bank). The conservative attitude of the banks is no doubt in the interest of its depositors and shareholders, but it is not well suited for the risks inherent to manufactured exports. It makes them want to pay little more than lip service to small business lending. Paradoxically, interest rate liberalization appears to have make it no easier for small firms to get credit. Before, when interest rates were kept artificially low, small borrowers were rationed out of credit, it is argued, because banks could be compensated for the extra screening and monitoring costs. Now, with higher interest rates, the same firms find it hard to convince banks that they can pay the interest charge.

Section 5. A Comparison of the Evidence with the Theory

The evidence we have uncovered on financial institutions and instruments in Zimbabwe is largely consistent with the predictions made in the previous chapter. Defaults and delays in payment do occur; banks see it as their main responsibility to prevent and discourage them. Financial institutions actively screen and monitor borrowers and rely heavily on legal forms of collateral. In conversations bank staff indicated a willingness to lend without legal collateral to borrowers 'they know very well' confirming that collateral operates as a substitute for information. Most of lending by commercial banks is rolled over short-term credit, i.e., overdraft facilities and banker's acceptances. Bank rely heavily on information they collect by monitoring their clients' accounts. Some forms of security, like the negative pledge, make it difficult for a client to seek credit elsewhere and thereby facilitate monitoring of a borrower's finances by the bank. Financial institutions have established procedures for the sharing of information about borrowers, but admit that they occasionally refrain from disclosing relevant information in order to dump bad clients onto their competitors.

Financial institutions do not offer a single undifferentiated financial instrument but rather a variety of instruments, each geared to meet a set of particular financial needs. Different financial institutions specialize in different categories of financial instruments. The evidence suggests that competition in financial markets is limited and concentration high. The range of financial instruments mirrors Zimbabwe's degree of economic sophistication: it is wider than in other African countries (e.g., Kenya Association of Manufacturers (1992)) but narrower than in developed economies. Certain types of financial instruments (e.g., derivatives, corporate bonds) are absent; others (e.g., venture capital, project finance, credit insurance) are offered by a limited number of relatively small institutions.

The functioning of the stock market is also consistent with predictions from theory. Before a new floatation is authorized, the firm's accounts must be verified by external auditors. Underwriters can also be seen as implicit guarantors of the veracity of the publicized information. Only a few large firms have floated shares on the stock market. New flotations are scrutinized for any attempt to offload bad debt onto anonymous shareholders. Investors who finance firm expansion often take a close interest in the management of the firm either by receiving equity shares (e.g., ADB, IFC) or by repeatedly interacting and monitoring the firm (e.g., SEDCO). Other long term investors (e.g., pension funds, insurance companies) do away with the need for close monitoring by relying exclusively on immovable collateral, i.e., land and buildings.

None of these conclusions in itself is entirely new. But together they demonstrate that the financial sector of Zimbabwe is refreshingly similar to that of more developed nations, even though somewhat less sophisticated. They suggest that, in the case of Zimbabwe at least, the difficulties certain firms may encounter in securing credit are due perhaps less to the inefficacy of the financial sector than to difficulties inherent to credit contracts anywhere. To ascertain whether the above assertion is correct, we need to enquire about the presence of variations in interest rate and

credit rationing and how they relate to firms' characteristics. We also need to compare borrowing from financial intermediaries and borrowing from other sources, like trade credit. To this we now turn as we examine the evidence on enterprise finance directly.

Chapter 4. Patterns of Enterprise Finance in Zimbabwe

We now examine how Zimbabwean manufacturing firms finance their activities. The evidence originates essentially from two sources: a panel survey of some 200 manufacturing firms conducted by RPED in the Summer of 1993, and a series of RPED case studies undertaken in the Summer of 1994. Results from the two surveys are combined in the presentation. The material, which is diverse and abundant, is organized in three separate chapters. In this chapter we provide a general description of the patterns of enterprise finance in Zimbabwe. After providing some information on survey design, we examine the relative importance of the various types of finance that Zimbabwean firms use and we take a close look at differences across firm size and ethnicity. The terms and conditions of various financial contracts are reviewed as well. Given the general paucity of information on trade credit terms and conditions in Sub-Saharan Africa, we examine that data in detail and look for evidence of a relationships between cash discounts and liquidity constraints. Equity is discussed in the last section. We continue our review of enterprise finance in chapter 5 where we consider screening and monitoring, contract enforcement, and reputation mechanisms. Conclusions on access to finance are summarized at the end of that chapter. Chapter 6 is devoted to the link between enterprise finance, investment, and firm growth. Policy implications are discussed in Chapter 7.

Section 1. Survey Design

The Panel Survey

In June and July 1993, a team of researchers coordinated by RPED undertook the first wave of a panel survey of manufacturing firms in Zimbabwe. The panel comprises 200 industrial enterprises in four subsectors of manufacturing: food processing, textile and garments, woodworking and furniture, and metalworking. The two basic criteria used in drawing the panel sample are that there were at least five employees at the time of the survey and that the firms were able to make their own investment decisions. The first criterion excludes most microenterprises and informal sector firms; the second excludes certain company divisions and subsidiaries of mother companies. The sample was selected from two sources: the Central Statistical Office in Zimbabwe, and the GEMINI survey of small scale and micro firms undertaken in August 1991. Details of the RPED panel survey and sampling procedure are discussed in other RPED publications, in particular RPED (1994), Chapter 2. The data from the first survey were analyzed in RPED (1993) and (1994) and are referred to in this report as the panel data.

The Case Study Survey

Among the 114 RPED panel firms located in Harare we randomly selected 40 firms to be interviewed in August 1994 and an additional 28 firms to serve as possible replacements. Of the initial 40 firms, 16 declined to be interviewed. 15 replacements were interviewed in their stead, resulting in a sample of 39 manufacturing firms. Table 1 breaks down the panel sample, the initial sample of 40 firms and the actual sample of 39 firms by ethnicity, size and sector of activity. The table shows that most of the initially selected Asians[12] and half of the Africans declined the interview and had to be replaced. Large firms were less likely to decline the interview than firms of small and medium size. Across sectors, a smaller proportion of firms in the metal and food processing sectors accepted to be interviewed. As a result, the final case study sample tends to overrepresent large firms, firms owned or managed by whites, and firms in textile and garments manufacturing. African and Asian entrepreneurs, microenterprises, and firms in the wood sector tend to be underrepresented compared to the panel sample.

In addition to manufacturing firms, 18 trading firms were also interviewed that represent a cross-section of suppliers and clients of manufacturers. They all operate in the same four sectors of economic activity -- food processing, textile and garments, wood products, and metal products -- as the manufacturing firms. Some are active in several of them at the same time. 11 of the trading firms are primarily in the retail business; the others are involved in wholesaling. In the absence of a readily available census of enterprises involved in trade, trading firms were not

[12] In this report we shall refer to Zimbabweans of African, European, and Asian origin as Africans (or blacks), whites, and Asians respectively. The Asian population in Zimbabwe includes people from the Middle-East (Arabs, Syro-Lebanese) and South Asia (India, Pakistan). The 'other' category comprises people of mixed ethnic background and a handful of entrepreneurs of Jewish origin. Because of the similarities in the way Asians and 'other' entrepreneurs socialize and interact with other firms and creditors, we treat them as a single category.

randomly selected from an existing census or sample of firms. The sample selection approach we adopted was essentially *ad hoc*. The sample we ended up with is probably not representative of the population of trading firms in Harare. We nevertheless attempted to represent firms of all sizes and ethnic origin. Partly due to a bias in who declined to be interviewed, partly as a result of the domination of chains of retail outlets over the retail sector in Harare, the sample of 18 trading firms counts mostly large firms and only one microenterprise. We were somewhat more successful in drawing non-whites into the sample, but the proportion of black traders who were interviewed is again small -- a consequence largely of our inability to secure interviews with microenterprises in the trading sector. Only 5 of the 57 surveyed firms (manufacturing and non-manufacturing) are owned or headed by a woman, a proportion substantially lower than that of female owners in the panel survey (19 percent). Since women tend to head smaller firms and to be more active outside Harare, our limited success in reaching microenterprises and our exclusive focus on Harare probably account for the difference.

Table 1. Characteristics of the Case Study Sample

Firm Characteristic	Panel sample (manufacturing)	Case Study (manufacturing)			Case study (non-manufac-turing)
		Original Sample	Declined Interview	Actually Interviewed	
Ethnicity[1]					
African	33%	24%	50%	23%	22%
European	46%	49%	19%	64%	56%
Asian	13%	15%	80%	5%	6%
Other	8%	12%	25%	8%	17%
Size[2]					
Micro	20%	25%	60%	15%	6%
Small	33%	30%	42%	28%	22%
Medium	23%	20%	50%	21%	17%
Large	24%	25%	10%	36%	56%
Sector					
Food	24%	23%	56%	23%	33%
Textile	13%	28%	27%	44%	17%
Wood	44%	30%	25%	13%	22%
Metal	18%	20%	63%	21%	11%
Mixed	n.a.	n.a.	n.a.	n.a.	16%
No. of Firms	*201*	*40*	*16*	*39*	*18*

[1] Ethnicity of the owner or manager is not known for 7 of originally selected 40 firms. The percentages shown refer to those firms for which the ethnicity could be determined.

[2] Micro: 1-10 employees; Small: 11-100 employees; Medium: 101-250 employees; Large: 251 employees and above.

Among the firms we interviewed, most of those owned or managed by Africans turned out to be microenterprises or small firms (11 to 100 employees). We interviewed only one medium sized firm headed by an African (101 to 250 employees) and 4 large African-managed firms, some of them parastatals. As was emphasized in the previous chapter, this is largely a reflection of the structure of firm ownership in the four sectors of enquiry, particularly in Harare. To gain a better perspective on the problems faced by black entrepreneurs, we were able, with the help of Venture Capital of Zimbabwe, to interview an extra half dozen black entrepreneurs heading medium to large private firms. These extra firms were obviously not randomly selected and many of them were not even in the four sectors of activity that we cover, so we did not include them in the quantitative results presented in this report. But in interpreting the data we draw on the additional insights that we gained during these interviews.

The questionnaire used in the case study interviews covered a wide range of topics relevant to enterprise finance. It included many qualitative questions as well as a number of open ended questions intended to stimulate discussion and uncover or explore issues that could not be anticipated. Most of the questions concerned different forms of enterprise credit, including bank loans and overdrafts, hire purchase and lease-to-buy contracts, trade credit, and in-kind loans among firms. Questions were also directed to understanding the role and importance of equity as a source of external finance and the reasons why outside equity may or may not be used. In addition to these questions about the use and forms of finance, we asked a number of questions about the different uses finance is put to, such as physical investment and managing the firm's cash flow. The ultimate goal of these questions is to learn how the nature of enterprise finance affects the real decisions firms make.

Given the small size and partially non-random nature of the case study sample, results should be viewed as suggestive rather than definitive. The strength of a case study approach, however, lies not as much in the ability to draw statistically significant or fully generalizable findings as in the ability to gain a deeper insight into the phenomena being studied. That objective we believe we have achieved, as the reader will see.

Section 2. The Relative Importance of Different Sources of Finance

Manufacturing firms in Zimbabwe get funds from a variety of sources. This variety is reflected in firms' outstanding balances (Table 2). On average, supplier credit is the most important source of funds, counting for a quarter to a third of all outstanding balances in all firm size categories.[13] Supplier credit is a form of short-term finance but, because it is typically renewed with each order, it can last indefinitely. Loans from non-bank financial institutions (i.e., finance houses, building companies, pension funds, and government credit programs) come next. Unlike supplier credit, these loans benefit mostly large firms. Moreover, non-bank loans are unevenly distributed within each firm size category: their large share in average outstanding balances is due to a small number of large loans. Bank overdrafts come next by order of importance. Because overdraft facilities are typically renewed annually, they contribute to firms' long term financing in the same way that supplier credit does. Together with trade credit, bank overdraft facilities are *de facto* the longest lasting form of finance manufacturing firms have access to. Overdrafts represent a large proportion of the funds received by microenterprises not because these firms receive large overdraft facilities but because they receive little credit from elsewhere, except suppliers. This is confirmed by the fact that only a small percentage of microenterprises have an overdraft facility (Table 3). Bank loans, like loans from non-bank financial institutions, are more important for larger firms, although for the largest firms they are superseded by non-bank finance. Borrowing from informal sources like friends and relatives, money lenders, groups, and competitors is not important for large firms, but it is occasionally important for smaller firms. Most informal credit recorded in the 1993 panel survey consists of short term loans of equipment and materials. These loans, repaid in kind, are a survivance from the UDI period during which shortages of raw materials and spare parts were severe and manufacturers learned to share whatever they could find. With trade liberalization, the practice is likely to disappear. Unlike in Ghana (Cuevas et al. (1993)) and Kenya (Fafchamps et al. (1994)), advances from clients are a negligible source of funds for Zimbabwean manufacturers, even for micro-enterprises.[14]

On the lending side, customer credit dominates the picture. Advances to suppliers are rare. Informal loans go mostly to employees. Some loans of equipment and materials by surveyed firms are also recorded. Net outstanding balances are positive for all firm categories: firms are net recipients of credit. The net contribution of informal lending is positive but small, a reflection of the extent of borrowing and lending among firms: on average many of these transactions cancel out. On the other hand, manufacturing firms in all size categories are, on average, net providers of trade credit. A more detailed analysis reveals that 135 of the 200 panel firms were net granters of trade credit in 1993; 36 were net recipients; and 16 had a zero position due to their non-participation in trade credit transactions. The fact that trade credit represents a net drain on manufacturing firms' financial resources is hardly surprising: the credit that firms receive from their suppliers covers only raw materials, but the credit they give to their clients must cover the value of their finished products. The difference between the two is value added. The more thoroughly raw

[13]In this report, micro-enterprises are those with fewer than 10 (full time and part time) employees , small firms have 11 to 100 employees, medium firms 101 to 250 employees and large firms have over 250 employees.

[14]This may, however, be an artifact of the sampling frame: small microenterprises were found to be the heaviest users of customer advances in Ghana and Kenya but they were not included in the Zimbabwe panel sample.

materials are transformed in the manufacturing process, the larger the value added, and the larger the need for other sources of finance to fill the gap between supplier and customer credit.

Table 2 : Mean Outstanding Balances (Z$'000)

Inflow of funds:	**Micro**	**Small**	**Medium**	**Large**	**Mean**
Gross outstanding balances	11	406	2799	25771	6812
Of which (in percent):					
Overdrafts	64%	17%	30%	21%	23%
Bank loans	0%	12%	20%	14%	14%
Loans from non-bank financial institutions	0%	9%	11%	30%	28%
Informal borrowing	9%	34%	8%	4%	5%
Owed to suppliers	27%	26%	30%	30%	30%
Owed to clients	0%	1%	0%	0%	0%
Outflows of funds:					
Gross outstanding balances	-9	-372	-2054	-13613	-3682
Of which (in percent):					
Informal lending	11%	1%	2%	6%	5%
Due from suppliers	0%	0%	2%	1%	1%
Due from clients	89%	99%	96%	94%	94%
Net balances:					
Net outstanding balances	2	33	744	12157	3129
Of which:					
Net trade credit	-5	-258	-1180	-5011	-1461
Net informal credit	0	134	202	358	168
No. of observations	*40*	*64*	*45*	*44*	*200*

Source: RPED panel data. Micro: 1-10 employees; Small: 11-100 employees; Medium: 101-250 employees; Large: 251 employees and above. A few firms could not be classified by size due to missing data; they are nevertheless included in the panel average. Positive number = inflow of funds; negative number = outflow of funds.

Average balances do not fully capture differences in the use firms make of various forms of finance. As Table 3 shows, larger firms are also more likely to make use of formal finance: whereas less than one quarter of micro enterprises had an overdraft facility, and only one had a loan, over 90% of larger firms had an overdraft facility and over half were repaying a bank loan. Similar results were obtained in the case study. Under 20% of the microenterprises reported ever having received a bank loan, whereas almost three quarters of large firms had one at some time. Firms headed by whites or Asians are more likely to ever have received a bank loan and to currently have an overdraft facility. In the case studies the use of bank loan increases uniformly with firm size but the use of overdraft shows a sharp contrast between microenterprises and other firms in the case studies. Accessing an overdraft facility seems to be a hurdle few microenterprises manage to pass. Larger firms are more likely to use non-bank financial institutions. The proportion of firms with an outstanding balance on an informal loan they received is relatively small and remarkably constant across firm size categories. Many more firms are involved in informal lending. Most of this lending simply consists of advances to workers. The money involved is small. The overwhelming majority of small to large firms receives and gives trade credit. Microenterprises, however, are twice as likely to give credit to their customers than to receive credit from their suppliers. To the extent that frequency of use is an indicator of ease of access, one can conclude from Table 3 that microenterprises have no easier access to supplier credit than they have to bank overdrafts. These issues are revisited in detail in section 4.

Table 3. Use of Formal and Informal Borrowing and Lending

Proportion of firms with:	Micro	Small	Medium	Large	Mean
An overdraft facility	23%	64%	91%	91%	68%
An outstanding bank loan	3%	13%	27%	50%	24%
An outstanding non-bank loan	0%	17%	13%	43%	19%
(Ever had a formal loan)	18%	41%	51%	73%	70%
An outstanding informal loan received	15%	14%	18%	23%	17%
Outstanding supplier credit	25%	81%	91%	95%	74%
An outstanding informal loan given	30%	53%	78%	84%	60%
Outstanding customer credit	55%	83%	98%	98%	84%

Source: RPED panel data

We note here that differences in the use of formal credit is not due to differences in the willingness to use formal financial institutions in general: as Table 4 demonstrates, most firms have at least one bank account; many have several. Microenterprises and small firms are thus much more likely than medium and large firms to have a checking account but no overdraft facility. Partly as a result of their inability to access an overdraft facility, microenterprises are also more likely to hold a savings account than other firms (Table 4). This savings account is then partly used as buffer against cash flow fluctuations (see chapter 6).

Table 4. Accounts Held at Financial Institutions

	Micro	Small	Medium	Large	Mean
% of firms with any account	70%	94%	98%	98%	91%
Mean no. of checking accounts per firm	0.8	1.1	1.9	2.6	1.7
Mean no. of savings accounts per firm	1.1	0.5	0.6	0.6	0.6

Source: RPED panel data

Now that we have presented the general pattern of enterprise finance, we take a closer look at each source of funds separately. Our main focus in the remainder of this chapter is uncover what determines differences in firms' access and use of finance. Whenever possible, we seek to assess whether firms are financially (credit and equity) constrained or not. We begin with formal finance, continue with credit among firms, and finish with equity.

Section 2. Credit From Financial Institutions

Formal Loans and Overdraft Facilities

We saw in Chapter 2 that banks offer a menu of financial services to their customers and that particular financial institutions specialize in specific instruments. The most widely used of the credit services provided by commercial banks are overdraft facilities and straight loans. A quarter of the panel firms responded to questions concerning the characteristics of their most recent formal loan. The 33 responses concerning bank loans are considered in more detail (Table 5). Given the small number of data points, caution should be applied in interpreting the results. The average maturity of bank loans is just over three years, a length to time sufficient to pay back a new machine or piece of equipment but well too short for a major expansion of the debtor's activities. There is considerable variation across firm size categories: the average loan duration for microenterprises is under a year, but for large firms it is over four years. It is unclear whether loans to small firms have a shorter duration because small firms are only interested in investments with a rapid payback, because banks insist on shorter payback period for small loans, or because banks wish to keep small firms on a tight leash. Regarding the interest rate, large firms pay less interest than small firms. The number of observations is small, however.

Higher interest and shorter credit duration for small firms are consistent with the existence of fixed screening costs per applicant, higher risk for small borrowers, and a desire to monitor performance through shorter loan duration, all of which were discussed in Chapter 2. The small number of bank loans encountered in the panel sample raises, however, another important issue, that of access to bank credit. To this issue we now turn.

Table 5. Characteristics of Bank Loans

	Micro	Small	Medium	Large	Mean
Maturity of the loan (in days)	361	534	880	1637	1180
Mean interest rate (% per annum)	21.5	27.6	22.3	13.7	20.4
Number of observations	4	6	11	9	33

Source: RPED panel data

In an effort to clarify whether differences in the use of bank loans are due to firms' choices or to differences in access to formal finance, panel respondents were asked a series of questions about loan applications and approval, and their reasons for not applying in case they did not. Results are summarized in Tables 6 to 8. About half the surveyed firms never applied for a loan; only a quarter of them applied for a loan in the year preceding the survey (Table 6). Large firms are twice as likely to apply as microenterprises. They are also twice as likely to see their loan application approved. Although small and medium size firms apply for loans more often, they are not significantly more likely to receive one than microenterprises.

Table 6. Loan Applications

Proportion of firms which:	Micro	Small	Medium	Large	Mean
Ever applied for a loan	38%	45%	55%	65%	51%
Applied for a loan last year	18%	22%	31%	34%	26%
Of which: got application approved	57%	57%	64%	100%	71%

Source: RPED panel data

Reasons for not applying are listed in Table 7. Half of the firms that never applied for a loan said they did not need one or were discouraged by high interest rates. One sixth stated they would not have received one or had insufficient collateral. Only one microenterprise out of ten stated it never applied for a loan because it did not need one, against one large firm out of two. One third of the microenterprises stated they did not apply for a loan because they would not get one; no large firm gave that reason for not applying. One fifth of the firms that did not apply feared being in debt or taking on more debt. These respondents probably worried that the envisioned investment may not generate a cash flow that was safe and regular enough to guarantee that they could repay the loan. It is of course unclear how many of these potential investors could have generated positive expected profits; presumably, some could have but, in line with Zeldes (1989) and Carroll (1992), they chose not to risk their enterprise for it. Firms were also asked why they did not apply for a loan in the year preceding the survey. A similar pattern emerges from their answers for the previous year (second part of Table 7).

Table 7. Reason for not Applying for a Bank Loan

Ever:	**Micro**	**Small**	**Medium**	**Large**	**Mean**
Would not get one/no collateral	32%	12%	14%	0%	16%
Dislike for (more) debt	26%	27%	7%	18%	21%
Interest too high	11%	15%	7%	9%	11%
Did not need one	11%	42%	47%	55%	37%
Other	21%	4%	27%	18%	15%
Last year:					
Would not get one/no collateral	24%	6%	3%	8%	9%
Dislike for (more) debt	16%	17%	3%	7%	11%
Interest too high	10%	23%	28%	7%	18%
Did not need one	30%	45%	48%	64%	46%
Other	20%	9%	17%	14%	14%

Source: RPED panel data. Based on the answers of those who did not apply.

The above results can be combined to derive lower and upper bounds on bank loan rationing (Table 8). In the year preceding the first panel survey, between a quarter and two fifths of the microenterprises were credit constrained: either their loan application was turned down, they anticipated rejection and chose not to apply, or feared they could not handle rigid repayment obligations. In contrast, credit rationing affected only 5% to 10% of the large firms. Credit rationing is largely internalized by microenterprises: while 8% of then were turned down for credit, three times as many did not even bother to apply. Relying on rejected loan applications alone to estimate credit rationing would thus lead to serious underestimation. Having said all this, it is nevertheless remarkable that the majority of firms do not appear credit constrained.

Table 8. Bank Loan Rationing

Proportion of firms which, last year:	**Micro**	**Small**	**Medium**	**Large**	**Mean**
(1) Applied for formal finance but were rejected	8%	9%	11%	0%	8%
(2) Did not apply because would not get one	17%	5%	2%	5%	7%
Total (1)+(2) = lower bound	25%	14%	13%	5%	15%
(3) Did not apply because dislike debt	13%	13%	2%	5%	8%
Total (1)+(2)+(3) = upper bound	38%	27%	15%	10%	23%

Source: RPED panel data

Mumbengegwi and ter Wegel (1994) further analyze the determinants of loan application and approval. They divide panel firms among those that expressed a desire to borrow from a formal institution and those that did not. Firms that declared they wanted to borrow but thought they would not qualify were classified in the first category; firms that said they did not need a loan or did not want to incur debt were put in the second. Using a probit regression, the authors show that the following firm characteristics are associated with a relatively high propensity to want a bank loans: larger firms, black African firms, those in the textile sector, those firms characterized as sole ownerships or partnerships, those with larger profits, and those located in Harare. Subsidiaries were found to have a lower propensity to apply for loans. Similar results obtain whether the dependent variable is the desire to borrow ever or just in the year preceding the survey. A second probit was run on those firms which wanted to borrow to determine the characteristics of those firms that were granted a loan. Only one variable, the size of the firm, was consistently found to have a significant, positive effect on the probability of loan approval. Profits had a positive but not always significant effect on loan approval. Ethnicity proved not to be significant even at the 90% level, thereby suggesting that race is not a determinant factor in banks' loan approval decisions. A similar result was found for Kenya by Fafchamps et al. (1994).

Because most black firms are small, however, and small firms find it hard to get loans, blacks may nevertheless feel discriminated against.

Discussions with case study respondents throw some additional light on this issue. They indicate that, apart from microenterprises, few firms are rationed completely out of bank credit but firms are much more likely to secure an overdraft facility than to receive a loan (see Table 3 in Section 2). The fact that small firms are less likely to have received a loan than large firms is consistent with the existence of fixed size transaction costs in loan applications. To the extent that small firms are likely to be eligible for small loans only, banks as well as small firms may choose not to incur these costs. An overdraft facility, on the other hand, is renewable yearly and thus granted *de facto* for an indefinite period. Transactions costs may thus be easier to amortize for small overdraft facilities than for small loans. To investigate these issues further, we ran probit regressions of on the use of loans and overdrafts, taking as explanatory variables the size of the firm, the ethnicity of the owner, the sector of the firm, the age of the firm, and whether the firm's primary activity was in manufacturing (Table 9).[15] Our results show that firm size increases the probability that a firm has ever received a loan and has an overdraft facility, but, probably because of the small size of the case study sample, the coefficient is only significant in the case of overdrafts. We find that blacks are less likely to have an overdraft facility and to ever have received a loan, even after controlling for firm size. In case of loans, however, the coefficient is not significant at the 90% level. Another result of interest is that manufacturing firms are more likely to receive loans than trading firms, presumably because the latter do not make significant and regular investments in physical capital and thus would find it hard to convince bankers they need a large lumpy sum of money.

Table 9. Probit Regression on the Use of Bank Loans and Overdraft Facilities

	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Ever got a loan	**-2.19**	**0.924**	-0.86	0.16	-0.03	0.441	**1.279**	0.212	0.673	-0.48	55
	0.018	*0.100*	*0.111*	*0.758*	*0.785*	*0.197*	*0.046*	*0.709*	*0.374*	*0.334*	
Has an overdraft *	**3.139**	-1.36	**-2.09**	-0.57	-0.03	**0.864**	-1.15	-0.45	**-2.17**		55
	0.073	*0.180*	*0.010*	*0.518*	*0.112*	*0.079*	*0.288*	*0.580*	*0.087*		

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics. Coefficients that are statistically significant at least at the 10 percent level are shown in boldface. The size of the firm, in these regressions as well as in all that follow, is measured as log10(number of employees). Other owners include Asians and other non-whites. (*) Adding the variable 'subsidiary' leads to numerical problems in this regression.

To ascertain whether certain categories of firms use bank credit less because they are discriminated against, we must separate differences in usage that are due to rationing from those that are the result of the firm's own decision not to borrow. One way to uncover whether rationing is present is by examining whether firms desired more credit than they received. Of the 23 case study firms who had used a bank loan in the past, only two indicated that the loan was smaller than they wanted. Thus, for the firms that receive bank loans, few appear to be constrained regarding the amount they borrow. The two firms that reported being constrained in this sense were both large, non-African firms. More firms, however, appear restricted in the size of their overdraft facility. Of the 45 firms who had an overdraft at the time of the case study, 22 had borrowed up to or over their ceiling in the previous twelve months, and 10 had attempted to increase their ceiling but were unable to obtain as much as they wished. Many of those who felt constrained cited high collateral requirements as a major reason. Another factor affecting the size of the overdraft is repayment performance: banks had reduced the overdraft facility of 6 of the 10 firms who tried to increase it. Though it was difficult to always ascertain with precision the reason why banks had done so, misuse of the facility by firms was cited by several respondents (e.g., development of a 'hard core' of debt; use of the facility to finance large purchases of land or equipment; purchases of an expensive car for the manager while pleading with the bank because the overdraft is in the red). These answers are in agreement with commercial bank practices as they were reported by bank staff.

[15]We do not have data on whether firms applied for an overdraft facility and were turned down.

The picture that emerges from this initial analysis is that, despite the fact that overdrafts are more commonly used than loans, credit constraints are binding more often for overdrafts. The reason is probably that the demand for overdraft facilities is greater than the demand for loans. Mumbengegwi and ter Wengel (1994) suggest several reasons why this may be the case. The first is the lower transactions costs and easier availability of overdraft credit, given that a new loan application and formal approval procedure are not required each time the overdraft is used. As a result, fixed transaction costs in processing the application and securing collateral must be incurred only once. As noted above, the transactions cost explanation is consistent with the observation that, except for microenterprises, firm size appears to matter more for the use of bank loans than for overdrafts (Table 3). The second reason why overdrafts may be preferred is the greater flexibility in use of the overdraft: payments do not have to be regular and variations in the firm's cash flow can be accommodated. We investigate the issue of flexibility in the next chapter.

A third reason is that interest costs may be lower for an overdraft even when interest rates are higher, because interest accrues only as amounts are withdrawn, whereas interest charges on a loan accrue on the entire amount from the date of disbursement. We do not have data on interest costs of loans and overdrafts so we cannot explore this explanation, but in the Kenya enterprise finance study, a number of firms cited the difference in interest cost as a reason for preferring overdrafts (Fafchamps et al. (1994)). The advantage of overdrafts with respect to interest costs is most apparent for unpredictable or highly fluctuating credit demands, such as to manage cash flow and to finance working capital. The fact that overdrafts are used predominantly to finance working capital is consistent with this explanation.

Fourthly, collateral requirements may be lower for overdrafts because banks can monitor the use of funds and threaten to withdraw the facility to induce compliance. Our results indicate that, except for microenterprises, the rationing of bank credit usually takes the form of a ceiling on the amount lent rather than complete exclusion from the market. Enforcement considerations, including high collateral requirements and previous repayment performance, appear to be the key factors determining access to overdraft credit. Finally, evidence that African firms are less likely to receive overdraft facilities than other firms suggests that bankers, rightly or wrongly, perceive such firms as less reliable and more risky. We cover all these aspects more in detail in Chapter 5.

Access to Hire Purchase Financing

The case study survey asked specific questions regarding hire-purchase (or leasing) contracts and the role they play in enterprise finance, a topic that was largely ignored in the panel survey. Results from case study interviews show that, on the whole, hire purchase is less commonly used than bank loans: only 37% of the case study firms have ever used hire purchase vs. 40% who have received bank loans and 84% who have an overdraft (Table 10). Hire purchase, however, is a form of finance that is particularly favored by intermediate size firms: roughly half of the small and medium size firms had used hire purchase at one point or another, while only a fifth of the small firms had ever received a loan. Microenterprises and black entrepreneurs appear largely shut off from this source of external finance. Hire purchase seems particularly popular with Asians and other non-white entrepreneurs who tend to be well represented among entrepreneurs of small and medium size firms.

Table 10. Use of Hire Purchase

	All	African	White	Other	Micro	Small	Medium	Large
Ever used HP	37%	15%	37%	67%	29%	53%	46%	25%
Nber of observations	*57*	*13*	*35*	*9*	*7*	*15*	*11*	*24*

Source: Case Study Sample

Probit analysis, however, fails to confirm that Asian and other non-white firms are more likely to use hire purchase, even after controlling for other factors (Table 11). Firm size is not statistically significant, probably because the effect of firm size on the use of hire purchase is non-linear. Manufacturing firms are less likely to use hire purchase than trading firms, possibly because hire purchase is easier to access for vehicles and that vehicles are the main form of investment in equipment that trading firms make. Subsidiaries of parent companies are also less likely to use it, presumably because they have access to cheaper finance through their mother company.

Table 11. Probit Regression on the Use of Hire Purchase

	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Use of HP	**1.943**	**-1.16**	-0.86	0.796	-0.02	-0.11	-0.09	-0.74	-1.25	**-1.02**	55
	0.037	*0.038*	*0.148*	*0.158*	*0.236*	*0.748*	*0.880*	*0.188*	*0.101*	*0.066*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics.

Case study interviews confirm that the source of hire purchase finance is overwhelmingly finance companies (see chapter 3): over three-fourths of the hire purchase firms used this source. Equipment suppliers and banks were cited in a few cases, but it is unclear whether they actually provided the funds or simply operated as agents for a finance company. Respondents were asked to list the advantages and disadvantages of hire purchase compared to other forms of finance. Among the firms using hire purchase, the most often cited advantage is that it is a readily available source of credit when the firm is short of cash and needs to purchase equipment. Other advantages cited also emphasize ease of access and convenience compared to bank credit. Important in that respect is the fact that the loan is guaranteed by the item itself, so that other collateral is not required. A few firms stated that the cost of hire purchase finance was comparable or lower to other sources of funds available to them. A couple firms in particular stated that by using hire purchase they had been able to lock into lower rates than the interest rate that subsequently was charged on overdrafts. This may have been true in the past but it was not while we were there: interest rates for hire purchase were very high and the general perception was that they would go down. Locking into a high hire purchase rate for three years was not an attractive option to most firms.

The disadvantage of hire purchase financing cited most often by users and non-users alike is its high cost relative to other sources of credit (12 of 21 firms that use hire purchase said so, 22 of 25 firms that don't said so too). Other disadvantages are that the firm can lose the equipment and the payments it has already made if it runs into repayment difficulties, and that the equipment may wear out before the loan is paid off. Despite these disadvantages, all but one of the hire purchase users said they would consider using it again. On the other hand, only three of the firms that had never used hire purchase said they would consider using it in the future, the most obvious explanation being that they have access to cheaper finance elsewhere.

Taken together, the evidence suggests that non-price rationing is not a significant problem with respect to hire purchase credit. The primary reason for using hire purchase is its easy availability and the primary reason for not using it is its price. That the cost of hire purchase credit is higher than bank finance further suggests the existence of a dual credit market: only those firms who are too small to purchase large quantities of equipment through bank loans, or to debit equipment purchases from their overdraft facility without risking being noticed, choose to acquire equipment through hire purchase. The simple fact that a borrower shows up on the hire purchase market signals to the lender that he or she was rationed out of the low cost credit market and is thus more risky. Borrowers unable to access the low cost market must therefore pay a risk premium. In theoretical terms, what we have is an adverse selection problem with a separating equilibrium.

What is remarkable and somewhat distressing, is that firms at the very low end of the size spectrum make little use of hire purchase in spite of its ease of access. Three mechanisms could explain this state of affairs. First, the size of the equipment investments microenterprises can credibly undertake is very small (Daniels (1994)), in many cases not justifying even the simplified procedure of a hire purchase contract. Second, microenterprises often prefer to buy second-hand, antiquated equipment (Teitel (1994)). Such equipment presents little security value to hire purchase companies who prefer to finance equipment that is either new or, at least, not too old. Third, microenterprises may find the risk of losing the equipment and all the payment they have made unbearable. Because microenterprises, as we shall argue later, have more difficulties smoothing their cash flow, and because, as we have seen, they have little clout with financial institutions, they are more likely to run into repayment problems and less likely to talk their way out of them. It could be, then, that microenterprises exclude themselves of the hire purchase market not so much because the investments they envision are not profitable, but rather because their financial strength is insufficient to handle the associated risk. Self-exclusion from credit may thus be yet another form of credit rationing, one that results from the absence of an insurance market for enterprise risk. This issue is revisited in chapter 6.

Section 3. Credit Among Firms

Access to Trade Credit

Having examined the three main sources of formal finance -- loans, overdrafts and hire purchase, -- we now turn to forms of enterprise finance that does not rely on financial institutions, namely trade credit and in-kind loans. We put a particular emphasis on the former. We divided the panel sample between the firms that receive supplier credit and those that do not and ran a simple Probit regression on the determinants of trade credit. Results are shown in Table 12. They indicate that larger firms and non-black firms are more likely to receive trade credit. There seems to be discrimination against black firms independent of firm size. This result is similar to that obtained for Kenya by Fafchamps et al. (1994). Bade and Chifamba (1994) conducted a more in depth analysis of the same data. They conclude that firms are more likely to get credit from their suppliers when: they purchase regularly and in bulk; the trade discount is large; their end of year stock is high relative to sales; they are more profitable; and they have an overdraft facility. Firms were found less likely to receive supplier credit when the supplier's share of that input is large; and when the firm is black or foreign owned. Firms' need for credit does not seem to be the sole determinant of trade credit, as those with an overdraft facility are more likely to receive trade credit. Bade and Chifamba's (1994) regression results also suggest that suppliers are more willing to extend credit for large purchases (large trade discount; bulk purchases) and to regular clients (regular purchases); these findings are in line with the sales promotion motive. Monopolists are less likely to grant credit than competitive suppliers, a result that directly contradicts the pricing motive for trade credit. Finally, credit enforcement considerations seem to play a role as firms with an overdraft facility and higher profits find it easier to get trade credit.

Next we examine firms' willingness to grant trade credit. As Table 12 shows, larger firms and non-black firms are more likely to give credit to their clients. The effect of race is less marked than in the case of supplier credit, however. Firms in the food sector are less likely to give credit to their customers, presumably because goods are perishable and turnover is rapid. In their detailed analysis of the same data, Bade and Chifamba (1994) show that firms are also more likely to grant credit when: they negotiate prices with buyers; they spend less on advertisement; they sell to wholesalers and retailers; and they receive credit from their own suppliers. Results are consistent with the sales promotion motive for trade credit (negative effect of a substitute, advertisement; positive effect of wholesalers and retailers; positive effect of direct negotiations, negative effect of the foodstuff dummy). The financial motive finds some support in the fact that access to supplier credit and firm size have a positive effect on customer credit. Results suggest that the inability to grant trade credit is another obstacle small firms must overcome to compete successfully with large firms.

Table 12. Probit Regressions on Trade Credit Use

	Const.	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Receives supplier credit	**1.28**	**-1.43**	-0.08	-0.01	**0.01**	-0.16	-0.48	0.05	5.53	168
	0.009	*0.000*	*0.848*	*0.663*	*0.018*	*0.726*	*0.123*	*0.918*	*0.999*	
Grants credit to clients	**1.33**	**-0.81**	0.10	-0.01	**0.02**	**-0.95**	-0.15	-0.29	6.22	200
	0.033	*0.064*	*0.854*	*0.638*	*0.027*	*0.052*	*0.725*	*0.592*	*0.999*	

Source: Panel data. Asymptotic significance levels for two-sided t-test in italics.

Many of these results are confirmed by the case study. As in the panel data, most of the purchases and sales made by manufacturing firms are on credit. On average, purchases on credit account for 81 percent of all purchases (Table 13). Again, there are sharp differences across ethnic groups or firm sizes. White entrepreneurs in the case study sample purchase virtually all their inputs on credit; black entrepreneurs, on the other hand, only buy a little more than half on credit. The pattern of supplier credit use is similar to that of overdraft facility: usage is high in all firm size categories except microenterprises. It appears therefore that suppliers are not significantly better than banks in their ability to reach microenterprises. This result somewhat contradicts expectations from the theory: since suppliers gather information on their clients as a by-product of the sale, one would have expected them to use that information to screen trade credit applicants more effectively than banks do -- and thus to grant credit to clients with no access to banks. If this result is confirmed, it implies that there is little hope of channeling more credit to microenterprises by granting more credit to their suppliers. Similar patterns emerge with regard to credit sales, with African firms and

microenterprises less likely to sell on credit than other firms. Large enterprises sell a smaller fraction of their output on credit than do medium size firms. A possible explanation for this is that large firms have market power and can impose their payment terms onto customers (see Fafchamps (1994) and Fafchamps et al. (1994) for similar conclusions).

Table 13. Proportion of Total Purchases and Sales Made on Credit

	All	African	White	Other	Micro	Small	Medium	Large
Purchases on credit	81%	57%	91%	79%	29%	81%	97%	90%
Nber of observations	*55*	*13*	*33*	*9*	*7*	*15*	*10*	*23*
Sales on credit	64%	41%	73%	53%	19%	65%	86%	61%
Nber of observations	*52*	*10*	*34*	*8*	*4*	*15*	*10*	*23*

Source: Case Study Sample

We further examined the determinants of trade credit use by running Tobit regressions on the share of purchases and sales on credit. The dependent variables, which was not collected in the panel survey, are the proportion of purchases and sales made on credit by each firm in the case study. The regressions account for both left and right censoring. Results are reported in Table 14. The results indicate that large firms both purchase and sell more on credit than small firms. African and other non-white firms also purchase less on credit than white firms, and African firms sell less on credit. Results show that manufacturers buy less and sell more on credit than retailers and wholesalers. That retailers sell less on credit is not surprising since the bulk of their clients are anonymous consumers. Food processing firms sell less on credit than firms in other sectors. This last finding is in line with the transaction motive for trade credit that argues that perishable items with a short shelf space should receive shorter credit terms (see chapter 2).

Table 14. Tobit Regressions on the Proportion of Total Purchases and Sales Made on Credit

	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Purchases on credit	**78.80**	**-20.1**	**-23.6**	-16.6	-0.13	**19.34**	-16.0	-10.6	-17.4	**21.64**	53
	0.000	*0.094*	*0.032*	*0.143*	*0.587*	*0.004*	*0.243*	*0.377*	*0.271*	*0.063*	
Sales on credit	18.21	**35.73**	**-25.2**	-12.9	0.151	**14.95**	**-30.9**	8.84	0.771	1.112	50
	0.360	*0.002*	*0.036*	*0.304*	*0.567*	*0.044*	*0.017*	*0.475*	*0.961*	*0.916*	

Source: Case Study Sample. Regression accounts for left (share=0%) and right (share=100%) censoring. Asymptotic significance levels for two-sided t-test in italics.

To throw additional light on the use of trade credit, case study firms were asked why they buy on credit. By far the most common response, cited by firms of all sizes and ethnic group, was that credit improves a firm's ability to manage its cash flow. White firms, however, were more likely to cite other reasons as well. Some, for instance, said that buying on credit is more convenient than cash from an accounting standpoint, and that it is safer than using cash for transactions because of concerns about theft. This can be taken as circumstantial evidence that liquidity considerations might be less important and security considerations more important for white firms. Some respondents also said they buy on credit because the supplier does not offer a cash discount, or because the implicit cost of trade credit is cheaper than alternative sources of finance. Only large firms stated that credit is automatically offered, suggesting that reputation and market power facilitate the provision of trade credit.

Firms were also asked why, if at all, they buy cash. The most common reason cited is that the supplier doesn't offer credit. African firms are more likely to cite the supplier's unwillingness to grant credit as the only reason for buying cash. Other firms often volunteered other reasons as well. Some said they prefer to take the cash discount, others that cash purchases are for small, occasional purchases not worth the hassle of applying to the supplier for a line of credit. One large firm saw cash purchases as a way to attract suppliers of timber from the countryside.[16] A handful

[16]We did not have the leisure to investigate further but it may well be that the timber was acquired without proper legal authority.

of firms, all microenterprises or small firms, stated they don't like to incur debt and prefer to pay cash. Self-rationing is consistent with the models of demand for credit developed by Zeldes (1989), Caroll (1992) and Zame (1993) (see chapter 2): these firms probably shy away from credit because they fear that a cash flow shock may reduce their ability to pay, lead to default, and have disastrous consequences on their personal assets. Consistent with this interpretation, most of the self-rationed firms keep precautionary savings to deal with emergencies, and only one indicated it had other sources of income it could draw upon in a crisis.

Asked why they sell on credit, most firms answered that it is an important dimension of their ability to compete. Customers don't like to pay cash, they say, competitors offer credit, and the firm can sell more by providing credit. Several firms, none of them a microenterprise, cited accounting convenience as another reason for selling on credit. One firm explained it was using factoring and thus could sell on credit and get cash right away from the factor. From the point of view of the firms, therefore, the sales promotion motive is the most important motive from providing credit to customers; the transactions motive is present but of secondary importance. Firms were finally asked why, if at all, they sell cash. Enforcement considerations dominate respondents' answers. In most cases, the firm sells cash because it believes it may not be paid and cannot enforce repayment. In fact, the client's failure to repay in the past is often cited as a reason for selling cash. As predicted in chapter 2, rationing of credit thus takes place whenever firms do not believe they can trust their clients to pay them. Other reasons for selling cash mirror those cited for buying cash: small, infrequent sales are mostly on a cash basis; some buyers prefer to pay cash; and the respondent may be unable to provide credit to its customers. There are no strong differences across firm sizes and ethnicity. Microenterprises are more likely to have customers who prefer to pay cash, a possible reflection of self-rationing on the part of buyers. Buyers may also prefer to pay cash simply for convenience reasons. Indeed microenterprises sell mostly to final consumers, who may prefer to pay on the spot to avoid coming back to pay and having to keep track of debt obligations. To summarize, evidence of rationing in trade credit is pervasive in the sense that certain buyers do not receive credit from their suppliers. We shall return to these issues in chapter 5.

Trade Credit Duration

More than half of the panel firms responded to questions about credit purchases, covering a total of 167 transactions with suppliers. Credit terms appear relatively standardized and do not differ substantially from those observed in developed economies (e.g., Dun and Bradstreet (1970); Duns Information Services (1993)): 41% of all firms reported that they pay suppliers in full 30 days after delivery; 13% pay after 45 days, and 11% only after 60 days (Table 15). The 45 days average delay is very similar to the average delay between delivery and payment observed in the four sectors of enquiry in the U.S. (see Chapter 2). This delay results from the combination of two elements: the time elapsed between delivery and statement, and the time between statement and payment. In Zimbabwe, suppliers normally establish monthly statements. The statement is sent toward the end of the calendar month -- either on the 25th or on the last day of the month, depending on the sector and firm. The statement specifies a term for the client to pay, but we found that not everybody interprets the terms of the statement in the same way.[17] Furthermore, actual payment may fall short of what is written in the statement. With these caveats in mind, three fourths of the case study firms stated that they are given 30 days from the date of statement to pay their supplier. Many of them, however, also indicate that credit terms vary across suppliers. Fewer of the small firms receive credit for over 30 days. Thus, not only are larger firms more likely to qualify for supplier credit, they also receive longer term credit (Tables 15). Discussions with respondents suggest that this is due to the better reputations or relationship that these firms maintain with their suppliers, thereby reducing suppliers' fears about eventually getting paid. Credit duration is also affected by market power because monopsonistic firms (which tend to be larger) often are able to dictate credit terms to their suppliers. Firms in the food sector tend to buy on standard 30 day credit terms or less, presumably because inventory time is shorter, as predicted by the sales promotion motive (chapter 2). In contrast, the observed credit terms are too long to be solely attributed to the pure transaction and verification motives discussed in Chapter 2. This is in line with the fact that sales promotion is the dominant reason firms give for providing trade credit.

[17]To see why, consider the following, typical situation. Suppose that the June statement says that payment is due by July 30th; bills that are not paid by the time the August statement is prepared are charged an interest penalty on the August statement as 30-day overdue. When asked how long he has to pay, a respondent may then answer 30 days, since this is what is written in the statement, or 60 days, since no penalty is charged until the second half of August. Both answers are correct but are symptomatic of a slightly different mind set.

Table 15. Average Number of Days Elapsed Between Delivery and Payment to Supplier

Repayment period:	All	African	White	Other	Micro	Small	Medium	Large
1 to 15 days	13%	11%	10%	18%	15%	7%	18%	13%
16 to 30 days	41%	42%	40%	39%	62%	43%	31%	41%
31 to 45 days	23%	16%	28%	16%	15%	25%	27%	22%
46 to 60 days	13%	11%	11%	21%	8%	18%	12%	7%
60 days and over	11%	21%	11%	5%	0%	7%	12%	17%
Average delay:	45	50	42	38	30	40	42	60
Number of obs.	*167*	*19*	*81*	*38*	*13*	*56*	*49*	*46*

Source: RPED Panel data

Panel firms were also asked about credit to their customers. The survey distinguished five categories of clients: private and public end users, private and public retailers and wholesalers, and foreign clients. In total, 175 credit transactions with clients were recorded. Of these, 85 concern sales to private retailers and wholesalers. Credit terms are similar to those given by suppliers (Table 16): in more than a third of the cases, firms report that clients paid their accounts in full 30 days after delivery. Large firms allow their private trading customers longer to pay on average than other clients. Small firms give long credit terms because they are more likely to deal directly with private end users who take longer to pay.

Table 16. Average Number of Days Elapsed Between Delivery and Payment by Clients

Repayment period:	All	African	White	Other	Micro	Small	Medium	Large
1 to 15 days	11%	26%	4%	16%	30%	16%	2%	4%
16 to 30 days	38%	37%	37%	35%	30%	42%	49%	26%
31 to 45 days	21%	9%	23%	29%	10%	14%	30%	23%
46 to 60 days	15%	14%	23%	10%	15%	14%	9%	23%
over 60 days	15%	14%	14%	10%	15%	14%	9%	23%
Average delay:	50	41	57	40	46	54	41	58
(with private retailer/wholesaler)	40	37	43	39	30	36	43	44
Nber of observations	*164*	*35*	*71*	*31*	*20*	*50*	*43*	*47*

Source: RPED Panel Data

The relationship between trade credit duration and firm characteristics was further explored with the help of a Tobit regression (Table 17). Results confirm that larger firms pay later. Asian firms give their customer less time to pay. Results indicate that old firms pay their suppliers sooner and let their clients pay later, a result consistent with the idea that more mature firms are less subject to liquidity problems and can afford to be generous. Metal sector firms give longer terms to their clients. There is some indication that African firms who receive trade credit are given more time to pay once other factors are controlled for, but the effect is not significant.

Table 17. Tobit on Duration of Trade Credit

	Const.	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
From supplier	**3.99**	0.26	-0.07	**-0.01**	**0.00**	-0.22	-0.06	-0.03	0.20	92
	0.000	*0.121*	*0.650*	*0.024*	*0.011*	*0.302*	*0.771*	*0.894*	*0.537*	
To client	**4.44**	-0.02	**-0.30**	**0.01**	0.00	**-0.73**	**-0.76**	**-0.77**	0.05	161
	0.000	*0.928*	*0.064*	*0.091*	*0.620*	*0.000*	*0.000*	*0.001*	*0.776*	

Source: RPED Panel data. Asymptotic significance levels for two-sided t-test in italics.

The Offering of Cash Discounts

The sales promotion motive explains why firms offer trade credit. It doesn't explain why firms use it in the presence of apparently very attractive cash discounts. Indeed, although explicit interest charges are rare (only ten such instances were recorded in the panel survey), in half of supplier credit transactions panel firms report they could have obtained a cash discount for early payment (Table 18). A little less than half the panel firms also offer cash discounts to (some of) their clients.

Table 18. The Offering of Cash Discounts

	All	African	White	Other	Micro	Small	Medium	Large
Offered by supplier	47%	64%	41%	54%	38%	45%	57%	36%
Offered to client	42%	21%	51%	53%	18%	42%	58%	52%
Nber of observations	*146*	*14*	*73*	*35*	*8*	*51*	*46*	*39*

Source: RPED Case Study Sample.

We ran probit regressions to examine whether there were significant differences among firms in terms of who gets offered and who offers a cash discount (Table 19). Results show is that textile firms are much more likely than other firms to be offered a cash discount, and that metal sector firms are less likely to be offered one. Non-white firms are more likely to be offered a cash discount, possibly because they are perceived to be more risky and must be enticed to pay early. On the giving side, African firms were significantly less likely to offer a cash discount. To throw some light on these patterns, we asked case study firms whether credit terms vary across suppliers and customers. Most firms reported that they do. In the discussion that followed, some respondents indicated that they indeed they use cash discounts to entice early payment by problematic customers. Others, in contrast, said that, when they need cash, they give a big discount to their cash rich customers to raise fresh money. Still others do not mention cash discount with problematic clients in the fear that it would undermine their price. All these findings suggest that trade credit terms are not set unilaterally by the selling firm, but often are subject to negotiation. This is consistent with Bade and Chifamba (1994), who found that firms that negotiate prices with their customers are more likely to provide trade credit. These variations in credit terms across suppliers and customers are not easily explained by the transaction or verification motives for trade credit, but they are consistent with the sales promotion, pricing and liquidity motives.

Table 19. Probit Regressions on Whether a Cash Discount Was Offered

	Const.	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
By supplier	**-1.54**	**.71**	**.56**	-.01	-.00	**.82**	**1.87**	**.71**	-.05	128
	.001	*.050*	*.064*	*.26*	*.293*	*.092*	*.000*	*.015*	*.933*	
To client	-.19	**-.63**	.02	.00	.00	**-.63**	**.58**	.24	.22	174
	.528	*.029*	*.927*	*.905*	*.262*	*.048*	*.033*	*.472*	*.502*	

Source: RPED Panel data. Asymptotic significance levels for two-sided t-test in italics.

Next, we examine the implicit interest rate that corresponds to the observed cash discounts. The discount rate reported in the panel survey is 6% on average; the median is 3.3%. Similarly, case study firms report that discounts

for early payment average between 3 and 6 percent. One possible reason why many firms continue to use trade credit is that the implicit interest rate is lower than alternative sources of credit. To see why, consider the average case in which the supplier must, in principle, be paid within 30 days of the date of statement. In practice, as the panel survey has shown, this means that the client has on average 45 days to pay from the date of delivery, assuming that deliveries are distributed randomly over the month -- more if buyers concentrate their purchases early in the month. In addition, penalties are typically charged only if payment has not been received by the next monthly statement. The buyer thus *de facto* has an additional 15 to 20 days to pay (taking into account postal and administrative delays). Thus we reckon that, on average, a client has 30 days more to pay (15 days before, 15 days after) than the explicit payment term written on the statement.

Table 20. Cash Discounts (expressed as annualized interest rate)

Offered by supplier:	All	African	White	Other	Micro	Small	Medium	Large
minimum	18%	21%	17%	20%	n.a.	20%	18%	18%
maximum	37%	54%	25%	44%	n.a.	48%	24%	36%
Nber of observations	*24*	*5*	*12*	*7*	*0*	*6*	*5*	*13*
Offered to clients:								
minimum	22%	26%	19%	31%	n.a.	25%	14%	24%
maximum	27%	26%	26%	31%	n.a.	25%	14%	37%
Nber observ. (rates)	*19*	*2*	*14*	*3*	*0*	*6*	*5*	*8*

Source: RPED Case Study Sample. Implicit annual interest rates were calculated on the basis of minimum and maximum reported cash discount for respondents who gave a point estimate for the credit term and by adding 30 days to the credit term (see text for justification).

On this basis, the annualized interest rate that correspond to cash discounts of, say, 3% and 6% are 18% and 36% respectively (Table 20). For comparison purposes, lending rates of commercial banks in June 1993 ranged between 29.5% and 47.5% per year (RBZ (1993), p. S23). At the time of the case study, the normal interest rate charged on overdrafts was around 30-35% per annum. For many firms, then, trade credit is an attractive source of finance. Additional support for this interpretation is provided by the fact that 15 percent of the firms gave as a reason for using trade credit that it is cheaper than alternative sources of credit. On the other hand, one third of the firms who buy cash said they do so to get the cash discount. Is there a contradiction? Not necessarily. If the cash discount is 6% or more, the return on early payment is equivalent to that of a money market financial investment, but without the transaction costs. A buyer with ample excess cash may thus choose to take the 6% cash discount. Furthermore, not everyone has access to the money market. The highest return small investors can catch is 18-20% on a savings account. The 18% annual return implied by a 3% cash discount is thus sufficient to attract payment from a buyer who has enough excess cash to want to use it, but not enough to consider investing it in the money market. There is, thus, evidence that market forces are at work in determining the level of cash discounts.

Regarding clients, explicit interest charges are again rare, but panel firms offer cash discounts in just over half the transactions. The average cash discount is 3.2%. This cash discount is another measure of firms' subjective discount rates. We computed annualized interest rates for customer credit as we did for supplier credit. Results based on precise data on 19 case study firms that provide credit from the statement date are presented in Table 20. The minimum implicit rates are comparable to those charged by suppliers, although the maximum rates are a bit lower. There is little variation across firm size or ethnicity. We also have data from 5 firms who provide credit from invoice date. The estimated interest rates for these firms are higher: the average minimum and maximum rates is 50% and 65%, respectively. Firms that grant credit from the date of invoice thus appear more cash constrained than those that grant credit from the date of statement.

To examine differences in the level of cash discounts among firms, we ran censored Tobit regressions on the annualized interest rate implied by a particular combination of cash discount and payment delay on firm characteristics (Table 21). Results suggest that non-white firms may be offered lower cash discounts (coefficients are nearly significant), perhaps because they do not have access to the money market, and therefore receive a lower yield on excess liquidities and are easier to lure into paying early. On the giving side, older firms tend to give lower cash discount,

possibly because they have reached maturity and are less concerned about their cash flow. Asian firms tend to give larger cash discounts. Firm size has no noticeable effect on the size of cash discounts.

Table 21. Censored Tobit on Cash Discount (based on implicit annualized interest rate)

	Const.	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
From supplier	.64	-1.53	-1.35	.04	-.00	-2.37	-.85	**5.04**	-.29	39
	.741	*.104*	*.105*	*.194*	*.147*	*.353*	*.642*	*.020*	*.834*	
To client	**4.20**	.02	**.65**	**-.01**	-.00	-.07	.15	.05	-.17	84
	.000	.922	.003	.038	.405	.845	.523	.857	.529	

Source: Panel data. Asymptotic significance levels for two-sided t-test in italics.

Data on cash discounts also offer some information on the extent to which firms are affected by credit constraint. For example, 6 case study firms were declining cash discounts equivalent to an annual interest rate of 60 percent or more. Credit at such high interest rates is uncommon in Zimbabwe. Presumably, only firms would fail to take advantage of such cash discounts that are either severely liquidity constrained, or for which transaction costs in accessing alternative sources of finance are high. If this is true, then it would make sense for suppliers to offer high cash discount in an effort to entice prompt payment. On the giving side, there are 6 firms in the case study sample who offer cash discounts of 60% or above; one of them also reported cash discounts from suppliers with implicit rates of at least 60 percent. They compose a highly diverse bunch: two are large white owned firms, two are small firms (one white and one mixed ethnic ownership), and two are microenterprises (one white owned and one African owned). 5 of these firms have overdraft facilities, but 4 had borrowed up to their overdraft ceiling in the past 12 months. Liquidity constraints may thus explain 5 of these 6 firms' willingness to pay high cash discounts. The sixth one did not appear financially constrained but was until recently headed by an old woman who is averse to debt and also may have sought to minimize collection costs in this way.[18]

Liquidity constraints may also be binding for other firms, though we don't have evidence of such high discount rates for them. There were 10 firms that had attempted to increase their overdraft facility but had been unable to obtain as much credit as they desired, suggesting that the overdraft ceiling is binding for them (see next chapter). Only two of the high discount rate firms are among them. Taken together, we have reasonable evidence that at least 13 of the 57 case study firms faced binding credit constraint and that, for 5 of these firms, the constraint has led to very high discount rates. One characteristic that some of these firms -- but not all -- have in common is that they are high growth firms: their rapid expansion has made them overextended financially. As a result, they are in a cash crunch which, hopefully, should resolve itself with time. These cases raise the issue of access to finance for rapidly growing firms, firms that attempt to seize expansion opportunities before they have been preempted by others. These firms constitute a category one would expect to emerge following a drastic realignment of relative prices as the one induced by structural adjustment. The effect of credit constraints on such firms my thus impede the pace of structural adjustment in Zimbabwe. We shall revisit these issues in chapter 6.

Changes in Commercial Credit Terms over Time

Finally, we asked case study firms whether credit terms had varied in recent years, particularly since the beginning of ESAP in 1991. Regarding credit from suppliers, one third of the respondents stated there had been no change. Another third stated that the duration of credit had shortened. Other changes include greater insistence on prompt payment, the setting up of interest charges for late payments, higher cash discounts, and that some suppliers have stopped offering credit. Firms gave similar responses regarding credit terms to their own customers, though a larger proportion stated that their terms had not changed. All these responses are consistent with the tightening of credit and the increase in nominal interest rates that followed financial liberalization and structural adjustment (see chapter 1). In a few cases respondents gave the opposite answer, namely that suppliers were now providing more credit

[18]This firm indeed reported that it keeps its overdraft facility for emergencies, and that it also holds precautionary savings in case of a cash flow emergency. It had not used more than 50% of its overdraft facility in the last 12 months.

or credit for longer duration, or that they were offering more favorable terms to their customers. Here the outcome of credit tightening is different, but, as discussions with respondents indicated, the cause is the same. These cases are concentrated into two different areas: textiles, and retail. The textile sector was severely hurt by ESAP as trade barriers were removed and the price of domestic cotton went up. Some of the largest firms in this sector have de factor been put into receivership. As a result, the firms that still operate in this sector have had to accommodate the difficulties of their clients and give them more time to pay. Retail firms faced a different predicament: with a higher interest rate, their hire purchase customers could no longer afford to buy. To stimulate their market, they chose to lengthen repayment time in order to keep monthly payments within the reach of their customers.

Except for those few cases in which credit terms became more liberal, these results indicate that firms respond to tighter credit not only by raising the price of credit, but also by reducing its availability and effective duration. This is achieved both by reducing terms and by adopting a stricter policy with regard to payment delays. Enforcement considerations may be the reason why firms reduce the availability and duration of credit as the cost of credit rises. As the nominal interest rate increases, the potential gain from delaying repayment increases. Because the economy is weaker, the risk of default is also higher. If enforcement were costless and perfect, firms could increase cash discounts and interest penalties for late payment to match the rising cost of credit. With imperfect and costly enforcement, however, these measures do not address the increased incentives to delay or default. Firms must therefore respond by tightening enforcement procedures, reducing the duration of credit, and in some cases, refusing further credit. The above suggests an additional mechanism by which an increase in the nominal interest rate can have real economic effects: by increasing the costs of enforcing commercial credit contracts, it contributes to a real reduction in the availability and duration of credit. Such effects can be expected to be contractionary, and may have contributed to the sluggish recovery from the 1992 drought. In the next chapter we consider enforcement issues in more detail.

In-Kind Loans

We saw in Table 2 that another source of credit found to be important in Zimbabwe is in-kind lending of raw materials and equipment among firms (Bade and Chifamba (1994)). This kind of lending was common during UDI, when the limited availability of imports forced domestic firms to depend upon one another for supplies (see chapter 1). The tight foreign exchange rationing that continued during the first decade after independence fostered the continuation of the same interdependence. Many firms report that in-kind loans are less common since the introduction of ESAP and the liberalization of trade and foreign exchange, but it is a practice that survives to this day. The first panel survey reports that 19% of panel firms lent in kind to another enterprise during the 12 months preceding the survey; 13% of them borrowed in kind (Table 22). Bade and Chifamba (1994) recognize, however, that the phenomenon of in-kind lending between firms was not immediately recognized during the panel survey and that their results are likely to underestimate the true extent of in-kind lending.

We revisited the issue in the case study and asked firms whether they had ever been involved in in-kind borrowing. 62% of the case study firms answered positively (Table 22). Raw materials are the item most commonly borrowed, followed by machines and, in some cases, tools, vehicles, or spare parts. The other party to the transaction was primarily a firm other than the parent company. Unlike in the panel survey, we did not find that small firms and non-white firms are less familiar with in-kind lending. If anything, case study results suggest that in-kind loans are slightly more common among Asian firms, microenterprises, and wood and metal firms. The difference between the two surveys may be due to the wording of the questions: many African entrepreneurs and managers of small firms acknowledged they had borrowed raw materials or equipment from each other but they did not necessarily see this as a formal loan. Only more sophisticated entrepreneurs recognized that the practice enabled them *de facto* to use other people's money and thus was in fact a loan. Others saw it primarily as a friendly service, an expression of solidarity, or a way of sharing risk (e.g., as in Coate and Ravallion (1993); Fafchamps (1994)).

Table 22. In-Kind Lending and Borrowing

Panel data:	All	African	White	Other	Micro	Small	Medium	Large
Lent in last 12 months	19%	5%	22%	17%	3%	11%	34%	31%
Borrowed in last 12 months	13%	4%	15%	8%	0%	11%	21%	19%
Case study data:								
Ever used in-kind lending	62%	62%	58%	78%	86%	60%	55%	59%
Nber of observations	*55*	*13*	*33*	*9*	*7*	*15*	*11*	*22*

Source: Panel Data and Case Study Data

Probit analysis of the case study data supports these hypotheses regarding Asian firms and wood and metal firms, but doesn't show a significant effect of firm size (Table 23). We also find that manufacturing firms are more likely than trade firms to use in-kind loans, a logical consequence of the need to secure essential inputs in order to remain in production.

Table 23. Probit Regression on Use of In-Kind Loans

	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Used in-kind loan	-0.56	**1.91**	0.64	**2.35**	-0.02	0.20	**-1.50**	-1.13	-0.02	0.86	54
	0.615	*0.021*	*0.290*	*0.048*	*0.253*	*0.621*	*0.061*	*0.110*	*0.987*	*0.230*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics.

In addition to affecting the need for in-kind loans, trade and foreign exchange liberalization likely have changed firms' inventory requirements and capabilities. With imports of raw materials more readily available, firms have less need to hold large inventories as protection against shortages. Furthermore, the costs of holding inventories has risen has real interest rates have increased. Half-way through the case study survey we became aware of these issues and we began asking questions on how inventories have changed since ESAP began. Of the 15 firms which answered these questions, 7 reported that they hold less inventory than before, 5 said about the same, and 3 more than before. Those holding more said that before ESAP they were unable to hold as much inventory as they wanted. Six firms reported how their raw materials inventory levels had changed since ESAP: on average, their inventory level before ESAP was 7.9 months of supplies but had since dropped to 2.9 months. It is dangerous to extrapolate from such a small number of observations, but if this change has occurred on a wide scale in Zimbabwe, it may have caused both a short term boost to the economy (as existing raw materials inventories were drawn down) and a longer term reduction in the costs of holding inventories for industry.

Section 4. Equity

In addition to credit, firms can finance their activities by seeking equity participation from partners or shareholders. To explore these issues, case study firms were asked about the equity structure of their firm and their views of equity finance as a source of investment finance. Most of them turned out to have more than one equity holder. Only about one third of the case study firms ever sought outside equity (Table 24). Microenterprises, sole proprietors and partnerships are much less likely to seek equity finance than larger, incorporated firms. Only 4 firms stated that they could not find equity finance because they did not know someone with money, all of them African-owned microenterprises. These results suggest that equity rationing is not generally a problem for sample firms, though it may be for African microenterprises.

Table 24. Access to Equity Finance

	All	African	White	Other	Micro	Small	Medium	Large
Ever sought outside equity	35%	40%	35%	29%	0%	40%	56%	35%
Ever floated shares	7%	11%	7%	0%	0%	0%	11%	11%
Consider going public	26%	44%	23%	14%	0%	0%	22%	53%
*Nber of observations**	*46*	*10*	*29*	*7*	*7*	*10*	*9*	*20*

Source: Case Study Sample. (*) The number of observations varies slightly between questions.

Obtaining finance through the stock market is even more remote for the vast majority of firms. Only large firms view this as being a realistic possibility, given the fixed costs (auditing, etc.) and reputational requirements of going public. 60 percent of the firms that stated they would not consider going public indicated that they are too small. Probit analysis supports the hypothesis that larger firms are more likely to consider going public (Table 25).

Table 25. Probit Regression on Whether Firms Would Consider Going Public

	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Going public	-8.35	-0.60	1.40	-1.16	0.02	**1.69**	2.76	4.18	3.26	1.03	41
	0.827	*0.517*	*0.218*	*0.207*	*0.569*	*0.012*	*0.942*	*0.912*	*0.931*	*0.622*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics.

The slow pace at which new issues are allowed on the stock exchange may constrain some of the larger firms: over half of the large respondents would consider going public but only 11 percent have so far raised equity in the stock market. Discussions with respondents indicate that large firms now view the stock market with a renewed interest. It is likely that new issues will follow. For most firms, however, equity finance is not a strong option, primarily because of the intrusion it represents upon the autonomy of current firm owners. The most likely cases of equity rationing thus are large firms that want to raise capital through new issues on the stock market, but have been prevented from doing so by the long queue of firms waiting for their issues to be allowed on the Zimbabwe Stock Exchange.

As discussed in Chapter 2, asymmetric information between investors and managers about the quality of the firm's investments leads to adverse selection and incentive problems in equity markets. As a result, investors are typically reluctant to put money in a firm without actively participating to its management. Moreover, imperfect information may result in ownership shares being undervalued by investors, thus discouraging firms from seeking outside participation. To explore these issues, we asked case study firms about who equity partners are and what they do. Most firms have more than one equity holder. Not surprisingly, the great majority of them turn out to be friends and relatives. Partners in virtually all cases are active in the firm. They participate in the daily management of the company rather than simply monitoring its progress periodically. Active partners are more likely to take part in the daily management of the firm in African and other ethnic firms than in white owned firms; in micro and small scale firms than medium and large firms; and in partnerships and corporations than in subsidiaries of holding companies. In most of the cases where the active partners do not participate in management, the firm is a subsidiary of a holding company and the partner is the parent company (7 cases). In these cases, the holding company may not directly manage the firm, but it always supervises its operations and monitors its progress. In the rest of the cases where partners do not participate in management, the firm is either a medium (1 case) or large (4 cases) corporation, or a parastatal corporation (1 case). These figures suggest a dichotomy in terms of access to equity capital: large firms with well established reputations can access equity capital without forfeiting a major degree of control over management decisions; while smaller and less well known firms can only access equity by sharing management and control.

These results are in line with concerns about imperfect information and incentive problems, which the active involvement of investors in the management of the firm attempt to correct. They also are consistent with the fact that only about one third of the case study firms ever sought outside equity. Almost two thirds of firms that have not sought outside equity stated they wanted to retain control of the firm or were worried about potential conflicts with new

partners. For most entrepreneurs, the main problem with equity finance is the loss of control of the firm this implies. Even for African microenterprises this is likely to be a concern, though they may not think of it because the possibility of obtaining outside finance is remote.

Chapter 5. Information Asymmetries and the Enforcement of Credit Contracts

We suggested in Chapter 4 that some of the observed features regarding firms' access to credit can be explained by information asymmetries and enforcement problems. In this Chapter we examine these issues directly. We first consider how firms and financial institutions screen credit applicants. Next we examine data on contract compliance and methods for resolving contractual conflicts. Finally, we discuss the role that reputation, trust, and socialization play in circulating business information and establishing commercial relationships. General conclusions regarding manufacturing enterprises' access to finance in Zimbabwe are presented in the last section.

Section 1. Screening, Monitoring and Collateral

We investigate in this section how firms screen and monitor credit applicants and the role played by collateral. We focus on the two main sources of finance used by Zimbabwean firms: banks and trade credit.

Banks

We begin by examining the loan application process. According to panel firms, the approval of bank loans takes on average just under four months, a length of time that is often judged too long by respondents (Table 1). Presumably, the length of the approval process reflects some of the screening costs involved. It appears that applicants to larger loans are screened more methodically by financial institutions: loans to larger firms take longer to approve than for smaller firms, probably because small firms are given small loans. Screening costs are thus not constant per applicant. Bank procedures typically authorize branch managers to require headquarter approval and extensive screening for large loans only. The size of loans that can be approved by branch managers vary over time and across individuals (see Chapter 3). Presumably, the loan size a particular manager is allowed to authorize is an expression of trust and recognition by bank management -- and thus a way for banks to reward screening performance by their employees.

Medium and large firms are more likely to shop around by contacting other banks before securing a loan. This may be because they have relationships with more than one bank, whereas smaller firms tend to deal exclusively with one bank (see number of checking accounts on Table 4, chapter 4). On 26 panel questionnaires specific categories of collateral were identified. In over half of the cases, used land and buildings were used as security. Equipment was used in two third of the cases, and one third used other forms of collateral. Small firms provide much more collateral relative to the size of the loan than larger firms, a possible reflection of banks' desire to hedge themselves against transaction costs in debt collection. This also helps explain why smaller firms were more likely to be credit rationed, as discussed in Chapter 4.

Table 1. Characteristics of bank loans

	Micro	Small	Medium	Large	Mean
Time required for approval (in months)	0.7	2.4	1.5	5.9	3.8
Value of collateral/loan amount	10.3	2.5	2.9	1.1	3.4
Percent firms approaching other banks	0%	0%	36%	50%	32%
Number of observations	4	6	11	9	33

Source: RPED panel data

These results were largely confirmed during the case study survey. Formal collateral was required for nearly all loans to case study firms. Only 4 case study firms had taken loans without explicit collateral, and these were all large and well established corporations that had been in business at least 20 years. For them, an ample equity and a solid reputation were presumably sufficient to make the bank feel secure without earmarking assets as collateral. In other words, it is not that no collateral was provided but rather that the general assets of the credit recipient constituted ample collateral. The most common forms of collateral used for loans are a mortgage on the firm's land and buildings, and a notarial bond on equipment and movable assets. In a few cases, a personal guarantee was provided by the owner or a third party (typically the holding company). One firm used export orders as collateral. Collateral is also required

for most overdraft facilities, though a larger fraction of overdrafts are uncollaterized. Two of the case study firms with uncollaterized overdraft facilities are small firms, one is a microenterprise. One is an Asian owned sole proprietorship; all the others are headed by whites. Some firms receive an overdraft facility together with a loan, in which case the same collateral is typically pledged for both. The most common form of collateral for overdrafts is again a mortgage on the firm's land and buildings. Other forms of collateral include a mortgage on personal property, third party guarantees (normally, from the holding company), and notarial bonds on equipment and stocks.

The case study survey confirms that the value of the collateral is often substantially higher than the overdraft ceiling. Excluding firms that provided collateral jointly for a loan and overdraft, the value of collateral is on average 4.1 times the overdraft ceiling; the median is 2.5 times. This ratio varies considerably across firms, from a minimum of 0 for those that did not provide any collateral to a maximum of 17.5. The firms for which this ratio is above the mean are not concentrated in any particular sector, size group, or ethnicity. Most of them had not tried to increase their overdraft facility, or if they had, did not experience problems doing so. Thus, having a high ratio of collateral to overdraft ceiling may not indicate that collateral requirements are constraining the firm; it may simply indicate that the firm's need for funds is not commensurate to the value of its collateral assets. Indeed, in many cases, firms pledge more collateral than is immediately required in order to economize on transaction costs and gain time, should they require an extension of the overdraft facility. Pledging more collateral is thus like taking an option on future overdraft extensions. The firms for which collateral requirements appear to be a binding constraint are those who have tried but failed to increase their overdraft limit. As mentioned previously, there are 10 such firms in the case study sample. For them, the ratio of collateral value to overdraft ceiling ranged from 0 (one of the firms had an uncollateralized facility) to 4.6. Taken together, the evidence suggests that collateral is not the only reason why firms may be constrained in the amount of credit they are able to secure, although it certainly is one factor.

The case study also investigated whether banks monitor the use of funds after disbursement. The evidence we collected amply demonstrates that borrowers have more flexibility in using overdrafts than loans. 19 of the 20 case study firms that answered questions about their most recent bank loan reported that the money was to be used for a specific purpose, the purchase of equipment in most cases. In a fourth of the cases, the bank paid the supplier of equipment directly, thereby ensuring direct control of the use of the funds. Control of the funds is particularly tight when the loan is used to import equipment from abroad. There is indeed the fear on the part of the bank as well as the government that if proper care is not taken the money may be stashed away on a Swiss bank account. In contrast, only 12 of the 44 firms that answered the same question about overdrafts indicated that the facility was earmarked for a specific purpose. 14 of these firms indicated that the bank monitors their use of the overdraft, but what they most often meant was that the bank makes sure they do not go over their limit. Few respondents felt that the bank monitored the specific use they made of the funds. That perception may be erroneous, however. According to bank managers, bank staff routinely scrutinize large transactions for possible misuse, and make sure no hard core develops on overdraft accounts -- as some respondents have learned the hard way. Although firms have (or at least perceive to have) substantial flexibility in how they use their overdraft facility, overdrafts are used to finance working capital in great majority of cases. This suggests that overdraft credit is not a major source of investment capital. We explore this issue further when we discuss investment finance in the next chapter.

Trade-credit

Unlike credit financial institutions, trade credit does not rely on formal collateral. Panel firms indicated that formal guarantees were required by suppliers in less than half the credit transactions recorded. The guarantee offered was, in two thirds of the cases, simply a signed invoice. Similarly, panel respondents required formal guarantees from their clients in only a third of the cases, mostly in the form of signed invoices. The attribution of trade credit clearly relies on a different mix of enforcement mechanisms than bank loans and overdrafts, and this is reflected in the screening process. Case study firms were asked questions about how they obtained trade credit from suppliers and what procedures they use to decide whom they give credit to. Responses show that the most common procedure to solicit credit is to fill a credit application form and provide trade and bank references. In many cases, the firm's relationship with the supplier or its reputation in the business are important. Reputation is used more by large firms; having a prior relationship with the supplier is more important for micro and small firms. A few microenterprises or small scale African-headed firms were recommended directly to a supplier by a third party. This in itself suggest that reliance on the formal credit reference system was insufficient to dispel the supplier's doubts. A few large firms used their market power to dictate their own credit terms to their suppliers.

When dealing with their own customers, sample firms operate largely in the same way. Only one respondent claimed that over the years he had developed the ability to judge people and thus relied on his own judgement a great deal. Most others require clients to fill a credit application form and to provide references. Many also indicate that they take on customers on a trial basis to allow them to demonstrate their reliability. Many firms collect information about their clients directly, by inspecting the client's business premises or home or by asking friends and others about the client's reliability. They also rely on previous acquaintances, on the reputation of the client, and on any other knowledge they may have acquired of that client over time. Several larger firms even require loan applicants to pass an independent screening by Dun and Bradstreet, a credit insurance company, or their factor. When suppliers are not satisfied, they may request the credit applicant to provide a deposit, a bank guarantee, or a personal guarantee to secure their line of credit.

Table 2. Probit Regressions on Screening and Ease of Access to Trade Credit

Suppliers	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Formal screening	0.95	0.4	**-1.12**	-0.1	0	-0.1	-0.8	-0.1	-0.2	-0.4	49
	0.27	*0.43*	*0.07*	*0.81*	*0.31*	*0.78*	*0.23*	*0.92*	*0.75*	*0.5*	
From 1st purchase	-0.92	-0.45	**-1.71**	-0.96	-0.01	**1.534**	0.729	-0.39	-0.70	-0.44	48
	0.460	*0.623*	*0.052*	*0.214*	*0.555*	*0.021*	*0.502*	*0.626*	*0.560*	*0.590*	
Clients											
Formal screening	3.956	-5.69	0.639	0.424	-0.04	**1.829**	-1.03	**-1.57**	-0.21	4.94	51
	0.953	*0.932*	*0.507*	*0.616*	*0.235*	*0.007*	*0.320*	*0.070*	*0.862*	*0.945*	
From 1st purchase	-0.42	0.788	**-1.23**	-0.68	0.001	-0.13	**1.17**	0.59	0.73	**1.33**	52
	0.636	*0.174*	*0.031*	*0.186*	*0.938*	*0.697*	*0.098*	*0.339*	*0.326*	*0.046*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics.

We ran probit analyses to test under what conditions firms are subjected to formal screening and whether they obtain credit from the first purchase. Results reveal that African firms are both less likely to be formally screened and less likely to obtain credit from the first purchase (Table 2). This seems to imply that some screening is done purely on the basis of the ethnicity of the applicant. Larger firms are significantly more likely to receive credit from the first purchase, suggesting the importance of reputation as a screening device. As providers of trade credit, large firms are more likely to use formal screening mechanisms such as credit application forms, and bank and trade references. Discussions with respondents suggest that there may be economies of scale in establishing such formalized systems. Several respondents also pointed out that a formal credit application process minimizes the risk of collusion between employees and clients. Firms in the textile sector are less likely to require formal screening of their clients. We do not have a convincing explanation to suggest, except perhaps that competition in this sector is fierce and suppliers avoid antagonizing clients by being too suspicious. African firms are significantly less likely to provide credit to first time customers. Many plausible explanations for this result are ruled out by the regressions themselves. It is not because these firms are smaller or newer and thus more vulnerable to risk: the coefficients on age and size are very small and entirely non significant. It is not because African firms do not use formal screening mechanisms: the third regression in Table 2 indeed shows that African firms, if anything, screen more (the coefficient is not significant, however; only size matters in that regression). The most likely explanation for this result is that it is a reflection of the liquidity constraints African firms face. This interpretation is reinforced by the fact that subsidiaries, which as a group are less credit constrained, on the contrary are more likely to give credit on the first purchase. Alternatively, it may be that African firms sell mostly to other Africans, who, as a group, are poorer and therefore more risky debtors than non-blacks while subsidiaries sell mostly to other well established firms, some of which are within their own group. African firms thus must, on the top of having less access to credit, show extra caution in dealing with their own customers. Both explanations are consistent with black firms giving less credit to their customers (see chapter 4).

Section 2. Contract Compliance and Flexibility

Now that we understand better how firms identify suitable clients, we continue with a picture of what happens in practice when people do not pay. As Table 3 indicates, contracts compliance is not perfect in Zimbabwe -- nor was it in Ghana and Kenya where similar questions were asked (Fafchamps (1994); Fafchamps et al (1994)). Most panel firms experience problems of late and non-payment by customers. Large firms are more likely to run into such problems and face a larger number of problematic cases than small firms, a possible reflection of the larger number of clients that large firms have. As one would expect, cases of late payment are much more frequent than cases of non-payment.

Table 3. Frequency of Contractual Problems

Proportion of firms which, last year:	**Micro**	**Small**	**Medium**	**Large**	**Mean**
Faced late payment by client	63%	72%	91%	93%	80%
Faced non-payment by client	48%	56%	80%	77%	64%
Number of occurrences:					
Late payment	24	18	98	101	61
Non-payment	4	6	6	19	9

Source: RPED panel data. The distinction between late payment and non-payment is based on the subjective perceptions of panel respondents. Non-payment are typically identified by respondents as situations in which little or no hope remain of collecting payment.

Firms' reaction to breach of contract was assessed in two different ways. Panel firms were first asked to imagine what would happen should they or their clients fail to pay (Table 4). Legal action was the most often cited response across all debt categories. Rescheduling was cited more often in connection with clients than with banks. The interruption of deliveries was seen as a possible sanction against non-payment in commercial transactions. This finding is consistent with the idea expressed in Chapter 2 that the threat to discontinue the trade relationship is part of the enforcement mechanism.

Table 4. Firms' perceptions

Action taken by/against:	**Financial institutions**	**Suppliers**	**Clients**
Interest penalties	17%	17%	14%
Legal action	44%	44%	49%
Rescheduling	8%	17%	23%
Interruption of deliveries	N/A	42%	22%

Source: RPED panel data. Note: multiple answers allowed

Firm behavior when faced with an actual contractual problem is somewhat different, however. Firms' initial response when faced with a payment problem is to seek an amiable resolution through direct negotiation (Table 5). Should these negotiations fail, firms hire a lawyer and threaten to go to court, more frequently so if the client is not paying at all. Private arbitration is rare. Few firms ever threaten clients to call upon the police. The majority of late payment disputes are settled and business resumed. Non-payment is more likely to sever the commercial relationship, a finding in line with what intuition would suggest.

Table 5. Resolution of payment difficulties

Action taken:	Late payment cases	Non-payment cases
Direct bargaining	54%	51%
Private arbitration	0%	6%
Threatened/went to police	2%	9%
Hired a lawyer	29%	71%
Outcome of the dispute:		
Dispute was settled	68%	43%
Respondent satisfied with outcome	78%	37%
Parties still doing business with each other	60%	18%

Source: RPED panel data

Contract Flexibility with Financial Institutions

These issues were revisited in detail during the case study survey. We asked firms about the attitude that banks exhibit towards borrowers having repayment difficulties. Three firms reported having delayed payments on bank loans. One rescheduled its loan with the bank. In the other two cases, the bank debited the firm's overdraft account and began charging financial penalties. Legal action by banks appears to be relatively rare; most firms felt that a bank would sue only if the borrower showed little willingness or capacity to remedy the situation. The threat of legal action, however, is credible and taken seriously by all firms. Banks appear to be somewhat more flexible with overdrafts. 18 firms indicated they had gone over their limit in the past 12 months and 7 had done this more than once; yet no firm ever had their overdraft cancelled. 13 case study firms had their overdraft ceiling reduced, however -- a painful and traumatic experience in most cases.

Regarding hire purchase, most case study firms expect that lenders will impose financial penalties in case of delay; all expect that the equipment will be repossessed if payment is delayed for long. The amount of time firms perceive finance companies to be willing to wait before repossessing the item varies from 60 to 120 days. One firm stressed that repossession could be postponed if the borrower has a good track record and makes good faith efforts to repay. The concern many firms express about the potential loss of the equipment in the event of non repayment suggests that enforcement is not difficult for credit suppliers. These results are consistent with the predictions made in chapter 2: when the item being financed is collateralizable, enforcement problems are minimized. In practice, only 3 of the case study firms that had used hire purchase had actually experienced repayment difficulties. Two of them experienced only short delays, one had to reschedule its debt with the lender.

Contract Flexibility in Trade Credit

Contract compliance in commercial transactions was examined in detail in the case study. Interviews indicate that it is common for firms to delay payment beyond the agreed term. One third of the sample firms stated that they normally pay after the term, in most cases within a month of the due date. Over 80 percent of the case study firms have delayed payment at least once (Table 6). A somewhat smaller fraction of white firms report paying normally after the term, but a larger fraction of white firms report having delayed payment at least once. The latter finding is hardly surprising given that white firms are typically older and larger and deal with more suppliers. Fewer microenterprises normally pay after term, partly because they often do not receive trade credit, and when they do they are afraid to lose it. African firms and microenterprises are less likely to delay for more than one month when they do delay, and are less likely to be charged interest penalties for late payment.

Table 6. Repayment of Supplier Credit

Pay after term?	All	African	White	Other	Micro	Small	Medium	Large
Normally	33%	40%	30%	38%	20%	43%	30%	32%
Ever	82%	73%	79%	100%	60%	100%	100%	67%
Nber of observations	*54*	*11*	*34*	*9*	*5*	*15*	*10*	*24*
When delay payment to supplier:								
Penalties charged	59%	33%	64%	67%	0%	64%	56%	72%
Penalties paid	42%	13%	50%	44%	0%	50%	38%	50%
Delay > 30 days	27%	0%	30%	33%	0%	15%	44%	30%
Nber of observations	*45*	*8*	*28*	*9*	*5*	*14*	*8*	*18*

Source: Case Study Sample.

In order to disentangle the effects of race, firm size and other factors, we ran a Probit analysis of whether firms normally or ever pay late. Results shows that food and wood sector firms are less likely to pay late (Table 7); other firm characteristics are not significant. These results have limited statistical power due to the small number of observations, but they do *not* support the hypothesis that African firms and microenterprises receive less trade credit because they are generally less reliable in repaying loans.

Table 7. Probit Regressions on Whether Firm Pays Suppliers Late

	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Normally pays late	-0.66	0.30	0.87	0.78	-0.02	0.50	**-1.49**	-0.91	**-1.44**	0.36	49
	0.509	*0.625*	*0.119*	*0.241*	*0.227*	*0.144*	*0.022*	*0.112*	*0.085*	*0.516*	
Ever paid late	3.47	-1.37	-0.13	4.85	-0.01	0.28	**-1.83**	-0.89	**-3.23**	-0.97	52
	0.023	*0.108*	*0.832*	*0.926*	*0.459*	*0.524*	*0.039*	*0.274*	*0.007*	*0.160*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics.

Similarly, over 40 percent of the case study firms reported that their customers normally pay late, and nearly all firms have had customers pay late at least once (Table 8). Microenterprises are less likely to have customers pay late and to charge interest penalties; when customers delay payment to microenterprises, they also are less likely to pay more than 30 days late. The reason for these findings undoubtedly is that microenterprises are typically so liquidity constrained that they could not afford having their customers pay late. Whenever they give credit, which tends to be less frequent, it is for a shorter duration and delays are kept short. Interviews with respondents indicated that micro-entrepreneurs take the time necessary harassing their client until they get their money. They could not survive otherwise. Firms owned by Africans and other non-white ethnic groups also appear less likely to have customers pay late or delay for a long time. A Probit regression showed no statistically significant coefficients, however.

Table 8. Repayment of Credit by Clients

Clients pay after term	All	African	White	Other	Micro	Small	Medium	Large
Normally	44%	25%	53%	25%	20%	42%	50%	48%
Ever	96%	82%	100%	100%	83%	92%	100%	100%
Nber of observations	*53*	*11*	*34*	*8*	*6*	*13*	*11*	*23*
When clients delay payment:								
Penalties charged	55%	56%	63%	25%	17%	46%	78%	62%
Delay > 30 days	36%	14%	46%	20%	0%	50%	78%	62%
Nber of observations	*49*	*9*	*32*	*8*	*6*	*13*	*9*	*21*

Source: Case Study Sample.

Next we investigate whether there are significant differences among firms in the incidence of financial penalties for late payment. Probit regressions show that larger firms are both more likely to be charged financial penalties by their suppliers and to charge financial penalties on their customers (Table 9). Penalties are thus more standard for larger firms that operate with their suppliers and customers in a less personalized manner. Asian-owned firms, on the other hand, are less likely to charge financial penalties than other firms, indicating that they rely more on informal means of enforcing credit terms. This is consistent with the way Asian firms were found to operate in Kenya (Fafchamps et al. (1994)) and stresses the importance of relation-specific capital (i.e., trust) in enforcing trade credit transactions. Several firms, however, indicated that they do not pay financial penalties. Large firms, for instance, though more likely to be charged interest for late payment, are no more likely than other firms to pay financial penalties.[19]

Table 9. Probit Regressions on Whether Financial Penalties Charged

	Constant	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Nber. observ.
By suppliers	0.107	-0.92	-0.29	0.414	-0.01	**0.616**	-0.34	-0.22	-0.11	43
	0.905	*0.136*	*0.633*	*0.498*	*0.599*	*0.095*	*0.61*	*0.711*	*0.896*	
To clients	-0.984	-0.38	0.658	**-1.294**	-0.01	**0.944**	0.429	-0.39	0.131	47
	0.292	*0.518*	*0.382*	*0.03*	*0.319*	*0.03*	*0.52*	*0.518*	*0.866*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics.

We also quizzed respondents on what happens when they pay suppliers late or when their clients delay payment to them (Table 10). Most firms view repayment delays of less than one month as part of doing business. It is understood that customers sometimes face temporary cash flow problems that prevent them from paying on time. Such delays are not cause for major concern, especially if the customer has a good track record. Firms get more annoyed, and begin taking action beyond 30 days. Many firms nevertheless indicate that what action they take depends upon their relationship with the customer and on the extent of communication between the two. Firms repeatedly stated that if a customer comes forward saying he is facing a short term problem, and then demonstrates a good faith effort to pay, no action is taken beyond, perhaps, the imposition of interest penalties. If the suppliers feels that the customer is not behaving responsibly, however, or if the customer is not valued, the supplier may stop deliveries and, in extreme cases, take the client to court. Firms typically have a hierarchy or sequence of responses when a client fails to pay, beginning with contacting the debtor to find out what the problem is, then using repeated requests, perhaps coupled with threats to stop supplying the customer, then stopping supplies, then sending the customer a final notice, and finally turning the matter over to an attorney. There is some variation among firms, as large, monopolistic firms are quicker to stop deliveries, while others appear at a loss to prevent payment delays on the part of large or monopsonistic buyers, including government agencies. Conversations with respondents indicate that flexibility appears to have diminished in recent years as inflation and tighter monetary conditions have led to much higher nominal interest rates, increasing incentives to pay late and making default more likely. Firms are now more anxious to receive payment on time and willing to impose penalties for late payment than they used to. In many cases they even have reduced the repayment period or stopped providing trade credit altogether.

[19]Several respondents indicated that financial penalties have been ruled illegal by the South African Supreme Court (whose jurisprudence Zimbabwe seems to share), unless they were explicitly stipulated in the contract. Furthermore, the maximum interest that can be charged is the 'legal' interest (i.e. the interest rate used by Zimbabwean courts to compound financial obligations over time) which was, at the time of the survey, 18% per annum, well below the money market rate. A number of suppliers now stipulate in their credit application form that they will charge interest for late payment, but many respondents either refuse to sign these forms, or simply ignore interest charges. As one of them puts it, "Who's gonna sue me for a few thousand Zim dollars? Besides, as long as I pay the principal and place a new order, the supplier is happy". Enforcement, again, occupies center stage.

Table 10. Repayment of Credit by Clients

	All	African	White	Other	Micro	Small	Medium	Large
When delay payment to supplier, eventually:								
Deliveries are stopped	74%	83%	75%	67%	100%	79%	88%	61%
Legal action is taken	72%	100%	67%	67%	100%	79%	67%	62%
Nber of observations	*45*	*8*	*28*	*9*	*5*	*14*	*8*	*18*
When a client delays payment, firm eventually:								
Stops deliveries	88%	71%	93%	88%	25%	89%	90%	100%
Takes legal action	82%	75%	85%	67%	75%	80%	90%	81%
Nber of observations	*49*	*9*	*32*	*8*	*6*	*13*	*9*	*21*

Source: Case Study Sample.

Most sample firms expect that their suppliers will eventually stop supplying them if they delay payment very long (Table 10); nearly all of them feel that this would occur within 90 days. Most also feel that suppliers would eventually initiate legal action, though they expect this to take up to 180 days. African and microenterprises appear more likely to expect such actions than other firms, and they expect supply cutoffs to occur sooner than other firms, a possible reflection of their weak economic position. That microenterprises fear legal action more than larger firms is contrary to our initial expectations. We had indeed thought that microenterprises would feel sheltered from judicial action by the high cost of suing them relative to the debts they may have. It may be that microenterprises have wrong expectations and that the threat of court action is not credible. Discussions with attorneys and credit recovery agencies, however, suggest otherwise: Zimbabwean courts seem to deal with uncontested delinquent debts expeditiously, to the point that debt recovery has become routinized and that transaction costs are lower than we had anticipated (see also chapter 3). As a result, summons are filed for relatively moderate sums: the threat of court action is, indeed, real. Irrespective of whether debtors' expectations are 'rational' or not, the fact remains that they expect to be punished, and this is sufficient inducement not to delay beyond reason.

The great majority of case study firms stop deliveries if their customers are 90 days late in their payments. They also are very likely to take legal action if payments are 180 days late. Among the microenterprises, however, only one stated it would stop deliveries if payments were delayed very long. The others said the question was not applicable to their situation because they do not make regular deliveries. Probit analysis further indicates that larger firms are more likely to stop deliveries (Table 11). It also confirm that larger firms are less likely to fear interrupted deliveries or legal action should they delay payment for long. Older firms also are less likely to perceive legal action as a potential threat. These findings suggest that relationships and market power are important factors in the enforcement of trade credit contracts: older firms are likely have well established relationships with suppliers, and suppliers have more to lose by attempting to punish a larger firm. We now explore these issues in more detail.

Table 11. Probit Regressions on Action Taken When Debtors Delay For Long

Suppliers	Constant	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Nber. observ.
Stop deliveries	**2.370**	0.643	-0.391	0.155	-0.023	**-1.160**	1.560	**1.522**	0.274	41
	0.054	*0.320*	*0.723*	*0.805*	*0.185*	*0.032*	*0.123*	*0.055*	*0.753*	
Take legal action	**8.306**	**-3.114**	7.734	1.709	**-0.084**	**-1.203**	1.474	-1.600	**-5.203**	35
	0.022	*0.093*	*1.000*	*0.148*	*0.068*	*0.074*	*0.269*	*0.255*	*0.069*	
Clients										
Stop deliveries	**-4.884**	6.970	4.985	1.771	-0.030	**5.030**	7.071	-5.135	-5.511	41
	0.071	*0.474*	*0.141*	*0.279*	*0.439*	*0.043*	*1.000*	*0.158*	*0.126*	
Take legal action	8.142	-6.729	-0.585	-1.308	0.016	-0.084	-0.873	-0.946	5.580	44
	1.000	*1.000*	*0.400*	*0.156*	*0.495*	*0.876*	*0.424*	*0.274*	*1.000*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics.

Section 3. Reputation, Trust and Socialization

We have seen in sections 1 and 2 that trust and reputation play a central role in the way creditors screen debtors and in the way contractual difficulties are handled. In this section we examine how trust is established and how reputation circulates among firms and financial institutions. We begin with firms' relations with bankers and continue with firms' relations among themselves.

Banks

We asked respondents whether they thought they would be barred from other banks if they failed to pay a bank loan on time. We of course already know that financial institutions share information about bad borrowers, but we wanted to ascertain whether firms perceived the existence of a reputational penalty for contract non-compliance. Of 13 firms for whom the question was relevant, 11 confirmed that a delinquent borrower would lose the ability to borrow from all banks. Only one claimed to be unaware of possible damage to his reputation. The last one responded "it depends on the relationship" between the bank and the firm and indicated that a borrower with a good track record demonstrating a good faith effort to repay could renegotiate his or her way out of a reputational penalty. Similarly, two thirds of the case study firms believe that failure to repay a hire purchase loan would result in the borrower losing access to credit from all sources of hire purchase finance, though a few respondents felt that it would depend on the circumstances of the case. These results confirm that a loss of reputation is a major inducement to repay and that reputation mechanisms are at work between Zimbabwe manufacturers and their bankers. The results also suggests that the trust that develops between borrowers and their bank plays a role in determining how the bank responds to repayment difficulties. This led us to investigate the relationship entrepreneurs have with their bank.

Table 12. Firms' Relationships with Banks

	All	African	White	Other	Micro	Small	Medium	Large
No relationship	14%	39%	9%	0%	57%	7%	18%	4%
Business relationship	23%	39%	20%	13%	29%	36%	9%	21%
Social relationship	63%	23%	71%	88%	14%	57%	73%	75%
Nber of observations	*56*	*13*	*35*	*8*	*7*	*14*	*11*	*24*

Source: Case Study Sample

We asked respondents what kind of social interaction they have with the people at their bank. Sample firms' perceptions of their relationship with banks are summarized in Table 12. Social interaction takes a variety of forms, one of which is the attendance to the sport events (golf tournaments, rugby matches) that rhythm the life of Zimbabwe's corporate world. Given the nature of the social interaction, it is not too surprising that only a small fraction of black entrepreneurs and owners of microenterprises have a social relationship with their banker, compared to other firms. They also are less likely to establish a social relationship with their bank. Ordered probit analysis confirms the role played by ethnicity in social interactions: African-headed firms are less likely to have a significant relationship with a bank, even after controlling for firm size and other factors (Table 13). None of the other coefficients is statistically significant. Anecdotal evidence collected during the interviews tells the same story. One African entrepreneur, for instance, reported that her bank had repeatedly refused to even consider her application for a loan despite the fact that she had been successfully expanding her firm and had been banking with the same bank for many years. On the other hand, several of the larger white owned firms commented on the usefulness of knowing the bank manager, not as a substitute for having a good financial record, but because it improves the bank's responsiveness to the firm's problems and expedites credit availability when needed. These results suggest that the lack of personal contact that most black entrepreneurs have with the world of finance probably reduce their ability to approach banks for credit and to discuss possible repayment difficulties with their banker on the basis of mutual trust. This is consistent with our previous finding that black entrepreneurs are less likely to obtain an overdraft facility.

Table 13. Ordered Probit Regression on the Nature of Relations with Banks

	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Relation-ship	2.350	-1.77	**-1.54**	0.499	0.024	0.364	0.078	-0.49	0.456	-1.14	54
	0.185	*0.206*	*0.029*	*0.635*	*0.128*	*0.453*	*0.949*	*0.471*	*0.716*	*0.103*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics. Dependent variable coded as follows: 1=no relationship; 2=minimal business relationship; 3=social relationship.

Trade Credit

Results in sections 1 and 2 stressed the importance of relationships between firms and their suppliers and customers. In agreement with these findings, nearly 90 percent of the sample firms indicated that they are familiar with their suppliers at least as business acquaintances, and many said that the relationship had social dimensions as well (Table 14). Several respondents commented on the importance of a good relationship with suppliers, not just to have access to trade credit or flexibility in repayment, but also to help ensure that supplies are available, reliable, and of good quality. Fewer microenterprises and African firms reported being acquainted with their suppliers, a feature consistent with our previous finding that suppliers are more likely to stop deliveries to such firms. Microenterprises and African firms are also less likely to be acquainted with their customers, and in general, sample firms are less acquainted with their customers than with their suppliers. This is because firms have more customers than suppliers, but it also reflects that for many years Zimbabwe was a supply constrained economy in which the availability of raw materials and spare parts was problematic. In these circumstances, one would expect firms to cultivate goods relationships mostly with their suppliers to guarantee supplies.

Table 14. Firms' Relationships with Suppliers and Clients

	All	African	White	Other	Micro	Small	Medium	Large
Social relationship with suppliers	89%	77%	86%	100%	71%	93%	89%	92%
Social relationship with clients	73%	62%	77%	78%	57%	67%	70%	83%
Nber of observations	*56*	*13*	*34*	*9*	*7*	*15*	*10*	*24*

Source: Case Study Sample. Other firms have either no personal interaction or minimal business contacts.

Probit analysis of the extent of relationships with suppliers and clients confirms that African firms have more superficial relationships with their suppliers, but shows no significant effect of firm size or age (Table 15). This is distressing, as it suggests that ethnic barriers may be more limiting to African firms than their young age and small size. Firm characteristics do not seem to explain whether firms have a social relationship with their clients.

Table 15. Probit Regressions on Socialization with Suppliers and Clients

	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
With suppliers	9.32	-6.96	**-2.71**	3.01	-0.04	-0.28	1.80	**2.44**	0.01	-0.74	53
	0.859	*0.894*	*0.023*	*0.967*	*0.215*	*0.689*	*0.357*	*0.029*	*0.988*	*0.480*	
With clients	0.54	0.68	-0.20	0.15	0.00	0.24	-0.45	0.33	-0.04	-0.40	54
	0.608	*0.284*	*0.701*	*0.866*	*0.835*	*0.499*	*0.516*	*0.558*	*0.961*	*0.425*	

Source: Case Study Sample. Regression accounts for left (share=0%) and right (share=100%) censoring. Asymptotic significance levels for two-sided t-test in italics.

Reputation also plays an important role in enforcing trade credit contracts. Most firms believe that defaulting on a particular supplier could result in losing credit from all suppliers. This perception is more common among larger firms. An implication of this is that larger firms have more 'social capital' at stake and so their reputation can be used as an enforcement mechanism. Most firms also indicate that delinquent customers may lose the ability to obtain credit

from other suppliers. Microenterprises constitute an exception: only one such firm indicated that it could face a reputational penalty. This is important because it may explain why microenterprises fail to get trade credit in the first place. Microenterprises also appear unable to impose a reputational sanction onto their own customers. Probit analysis indeed supports the conclusion that smaller firms are less likely to impose reputational penalties (Table 16). This alone would explain their reluctance to grant trade credit. These findings are consistent with the theory presented in Chapter 2.

Table 16. Probit Regression on Reputation Impact of Trade Credit Default by a Client

	Constant	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Nber. observ.
Lose credit from others	-1.087	0.575	-0.104	-0.389	0.004	**0.886**	**-2.009**	-0.849	-0.742	44
	0.325	*0.358*	*0.890*	*0.515*	*0.797*	*0.058*	*0.012*	*0.213*	*0.373*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics. A similar Probit analysis on the reputation impact of trade credit default vis a vis a supplier shows no significant differences across firms.

The most common means by which reputational penalties are imposed are the information published in the Dun and Bradstreet gazette (see chapter 3), and informal networks of suppliers who share information. Most firms nevertheless indicate their reluctance to spread "bad press" about a problematic client as long as there's a chance they may get paid. Many, however, respond to inquiries made about particular customers. Reputational penalties are thus strongest in case of clear cut default. The importance of formal credit ratings via Dun and Bradstreet suggests a degree of sophistication in the circulation of credit reference information not found in Ghana or Kenya, where firms rely exclusively on informal information networks, if at all (Fafchamps (1994), Fafchamps et al. (1994)).

Taken together, these results support the importance of both reputation and personal relationships in commercial transactions and particularly trade credit. Reputation is important in Zimbabwe because of the existence of several interconnected networks of credit reference information, at the center of which lies Dun and Bradstreet. The existence of these networks is what enables firms to rely on formal screening procedures and to grant credit to many first time buyers. Thus, as we have argued in chapter 2, the system frees firms from exclusive reliance on personal relationships and past experiences. It, however, does not benefit all firms in the same way. Large firms with a well established reputation of course are the major beneficiaries of the system. Many smaller firms eventually benefit from the system as well once they have established a track record. But the reputation system represents a formidable hurdle for new firms and generally fails to benefit microenterprises because they often fail to meet an essential prerequisite, registration with the Registrar of Companies. Registration is indeed costly as it requires the establishment of formal accounts and the payment of various fees. Firms without a publicly visible track record must fall back on more rudimentary practices for establishing trade credit relationships of the kind that we documented in Ghana and Kenya (see Fafchamps (1994) and Fafchamps et al. (1994)), namely: personal recommendation and trust building. This is why those who do not pass the formal screening often are given another chance to prove themselves over a trial period. They may also be able to drum support from a third party who will vouch for them or even, in some rare cases, guarantee the payment of their debts. At the bottom of the scale are clients who failed in the past, or who are too small for the supplier to bother. At every step of the screening mechanism, suppliers must assess the information they collect in light of what they know of the general population of potential trade credit recipients. To do so, they are likely to use all the information available to them, including one piece of information that is difficult to hide: the ethnic origin of the firm's owner or manager. Because blacks as a group are poorer and black firms tend to be younger and less experienced, statistical discrimination probably affects how suppliers perceive them, particularly, but not necessarily, if it is reinforced by prejudice.

Section 4. Enterprise Finance in Zimbabwe: A Summary Assessment

We presented in Chapters 3, 4 and 5 a detailed analysis of enterprise finance in Zimbabwe. We now seek to summarize our results and to compare them with the theoretical predictions made in Chapter 2. We begin by discussing the evidence on credit rationing and self-rationing. The emphasis is put on the factors that seem to influence differences across firms regarding access to finance. Next we turn to the diversity of financial instruments

and contract terms. Then we examine screening and monitoring practices and stress the importance of reputation and trust in the enforcement of commercial contracts. We finish with a brief discussion of the limited evidence we collected on equity financing and competition in financial markets.

Credit Rationing and Self-Rationing

There is ample evidence that certain Zimbabawean manufacturing firms, but not all, are rationed in their access to credit. Small firms find it most difficult to get loans from financial institutions, presumably because agency, information, enforcement, and transaction costs are higher than what could credibly be paid by the candidate borrower. The present net worth of firms, as reflected in their profitability, favors access to credit from both suppliers and financial institutions. The fact that firms typically pledge more collateral than the value of the credit they receive emphasizes the role of enforcement considerations on the part of lenders. Although high levels of collateralization are not, by themselves, evidence of credit rationing, several firms mention that the absence of collateral is the reason they cannot get bank credit. This confirms that lack of enforcement can, by itself, cause credit rationing. Several of the credit constrained firms fit theory predictions: they are young and rapidly growing.

Evidence further suggests that African firms are less likely to obtain overdrafts and trade credit than other firms, controlling for factors like firm size, age and sector of activity. These findings suggest that differences based purely on ethnicity exists in Zimbabwe's credit market. In our view, this is due to a combination of two factors. First, African firms as a group may be subject to statistical discrimination: they are perceived as less reliable in repaying loans, possibly because they receive less credit and find it harder to smooth cash flow shocks (see Chapter 6). Second, African firms are generally less well connected and have few acquaintances in banking and business. Socialization with potential sources of finance is low. Personal relationships are rare. These two factors combine to compound their difficulties in accessing external funds.

Although overdrafts are more readily available than bank loans, credit ceilings appear to be more of a problem with the former than with the latter. The main reason seems to be that demand is greater for overdrafts because of lower transactions costs and greater flexibility. Enforcement considerations appear to be the primary reason for constraining overdraft credit through ceilings and high collateral requirements. Having a personal relationship with bank staff also appears to be of some importance in access, flexibility and enforcement of credit. Having a checking or savings account is insufficient to receive bank credit. Hire purchase is an important source of credit for small and medium size firms. There is little evidence that this type of credit is rationed, except perhaps for those firms -- e.g., microenterprises -- who rely mostly on second-hand equipment. These findings are consistent with collateral advantages cited in Chapter 2.

Regarding trade credit, the sales promotion motive received some support from the data. But the financial motive in the simple form in which it has appeared in the literature was in apparent contradiction with our findings: firms most in need of funds were not the most likely to receive trade credit. The discrepancy between facts and the simple version of the financial motive can be explained by concerns for credit repayment on the part of suppliers. The importance of regular purchases as a determinant of supplier credit and the use of stopped deliveries when payment is not forthcoming can be understood as evidence that the enforcement of trade credit contracts relies primarily on repeated interaction. This is confirmed by the fact that formal collateral is not used for trade credit.

Finally, there is evidence that certain firms ration themselves in credit, possibly because of a high degree of risk aversion and susceptibility to risk. These firms are predominantly micro and small enterprises, a finding consistent with the discussion in Chapter 2.

Financial Instruments and Contract Terms

Firms typically finance their activities from a variety of sources, not a single undifferentiated source. Overdrafts are the dominant from of formal credit that manufacturing firms have access to, and they are occasionally used to finance small purchases of machinery and equipment. Trade credit is an important source of short term liquidity for most firms. With the possible exception of cash discounts, individual lenders do not appear to offer a menu of options to borrowers to cause them to differentiate themselves by type. Rather, different financial institutions specialize in differentiated credit instruments -- e.g., overdraft facilities offered by commercial banks, hire purchase by finance houses, off-shore finance by merchant banks, mortgage based lending by building societies, suppliers for trade credit -- and attract only partially overlapping categories of borrowers.

Trade credit terms are comparable to those observed in industrialized economies (see Dun and Bradstreet (1970)). The cost of funds needs not be equalized across sources of funds, as a comparison between the interest rate on overdrafts and the implicit cost of trade credit indicates. There is some evidence that the interest charged on small loans is higher, a possible reflection of transaction costs. Banks and suppliers modulate the credit terms they offer according to the type of borrower. Large firms tend to get credit for longer periods at lower interest rate. to different borrowers. They are also more likely to be offered cash discounts by their suppliers. These findings may reflect differences in credit costs due to the existence of fixed transaction costs, and market power. Variations in cash discounts and repayment periods thus appear to reflect differences in suppliers' own conditions as well as differences among their customers. Financial and sales promotion motives, enforcement concerns, and market power all help shape the terms of trade credit.

Banks display some flexibility in responding to borrowers' difficulties and occasionally allow them to go over their overdraft ceiling or to reschedule debt repayment. Since contractual flexibility is present even though legal enforcement is viewed as functioning rather well, banks may recognize that flexibility pays off in the face of exogenous risk, as predicted in Chapter 2. This finding confirms that legal enforcement and contractual flexibility are not in opposition to each other but rather complementary responses to the joint presence of risk and incentive problems. Substantial flexibility is evident in most trade credit transactions. Suppliers typically have a hierarchy of responses to payment delays. As expected in Chapter 2, they begin with low cost collection efforts, then progressively increase the pressure on delinquent customers. The fact that suppliers are reluctant to embark upon severe measures such as legal action and spreading bad press on a client suggests that they also value the relationship and hesitate before undertaking an action that will damage it. As was found in Ghana and Kenya (Fafchamps (1994), Fafchamps et al. (1994)), most cases of late payment are resolved in an amiable fashion and business is resumed. Only large monopolistic firms were seen to behave differently, imposing severe penalties more quickly. This may be because their desire to preserve a relationship is less pressing -- the client can be replaced -- and because they find it in their interest to develop a reputation of toughness.

There is no evidence that African firms are less reliable than other firms in repaying trade credit on time. This may be interpreted as limited evidence that statistical discrimination is based on an inaccurate perception of black firms' reliability and thus is prejudiced. An important caveat is that RPED surveys in Zimbabwe exclude the smallest of the microenterprises where most African enterpreneurs can be found (Daniels (1994)). If small microenterprises not covered here have shaky finances (see Daniels (1994)) and therefore are bad payers, and if suppliers can not assess African firms' size accurately, then statistical discrimination may not entirely be due to prejudice. The evidence suggests another important explanation why African firms get less trade credit: network effects. Suppliers, who in their majority are white or Asians, are simply less acquainted with African enterpreneurs and therefore have less information on their reliability. A point in favor of that explanation is that we did not find evidence that black trade credit recipients are more (or less) likely to be charged financial penalties, to have deliveries stopped, or to be subject to legal action when they delay payment: once sufficient trust has been built for trade credit to be granted, black firms are treated on an equal footing with other firms. In contrast, large firms are less likely to be subjected to interrupted deliveries or legal action, a finding in agreement with the importance of market power and suppliers' desire to keep large customers. Legal action is less likely against older firms when they delay payment to suppliers, stressing the importance of relationships and reputation as alternatives to legal sanctions.

Screening, Monitoring and Reputation

Zimbabwean lenders use a combination of formal screening, statistical discrimination, reputation, acquaintance, and, in the case of banks, collateral before granting credit. Most lenders, either banks or suppliers, use sophisticated screening procedures and rely on the reputation of the credit applicant if it is easily assessed. Unknown clients may be provided credit only after a trial period long enough for trust to develop between the parties. As predicted in Chapter 2, large firms are more likely to obtain trade credit thanks to reputation and market power effects. The evidence again suggests that statistical discrimination may be used when assessing credit recipients. African firms, for instance, are less likely to be formally screened. These findings, combined with what was said earlier, indicate that suppliers find it more difficult to collect and gauge information on African firms than on other firms. African firms themselves are also less likely to provide trade credit, a possible reflection not only of liquidity constraints but also their own inability to identify trustworthy clients.

Banks are more likely to monitor the use of loan funds than of an overdraft facility. Banks nevertheless check whether borrowers exceed their credit limit and maintain high balances for a long period of time -- i.e., develop a 'hard core' on their overdraft. When a borrower is caught abusing an overdraft facility, credit is withdrawn. These findings are consistent with theoretical predictions about the use of renewable contracts to prevent moral hazard. Since an overdraft facility involves a potentially much longer term relationship than a loan, banks can use the value of the relationship as an additional enforcement device and economize on monitoring at the disbursement stage. Trade credit largely follows the same logic: suppliers monitor clients indirectly through their monthly repayment pattern. If payment is not forthcoming, they eventually withdraw credit by stopping deliveries.

Reputation and relationships are important means of determining access to trade credit as well as of enforcing repayment. The ability to use reputational penalties is fairly sophisticated in Zimbabwe, and the use of credit ratings by Dun and Bradstreet and other organizations fairly common. Thanks to reputation effects, access to one type of finance, e.g. overdraft, helps accessing another, e.g. trade credit. Informal networks are also quite important in "spreading the word" about bad debtors. Reputation effects are most important for large firms. Relationships are more important for small and medium firms. Microenterprises typically have neither. African enterpreneurs are less likely to know their banker or their suppliers personally. Due to this lack of connections with the white and Asian dominated business community, African firms appear at a disadvantage in accessing credit beyond what can be attributed to their young age and small size.

Equity

There is a dichotomy between large and small firms in access to equity capital. These differences seem attributable to reputation effects and high fixed costs. We did not find evidence of equity rationing, except for microenterprises and black enterpreneurs who often declare not knowing potential investors. Very large firms may face delays when floating shares on the Zimbabwe Stock Exchange. Self-rationing, however, is important as most firms regard outside equity as a major intrusion in their business. Indeed, as predicted in Chapter 2, outside investors usually demand a substantial amount of information and control over the firm in order to prevent moral hazard. Firms often show little interest in outside equity due to the loss of control that it entails.

Competition in Credit Markets

Although competition in Zimbabwean credit markets was not the focus of RPED surveys, the collected evidence throws some light on the issue. We did not find strong evidence of non-competitive practices in the formal financial sector as far as the allocation of credit to manufacturing firms is concerned. We nevertheless uncovered evidence that interest rate spreads and margins on foreign exchange transactions were excessive at the time of the case study survey. Considering differences in transaction costs and risks, interest rate differentials between borrowers are not large. Implicit interest rates on trade credit are generally in a range below or close to financial market rates. Some firms appear to have discount rates higher than interest rates on overdraft facilities, presumably because of credit constraints and transaction costs. The market power of firms seems to play a role in affecting the terms of trade credit, however.

Armed with a better understanding of enterprise finance in Zimbabwe, we can now turn to the effects of credit on firms' ability to grow and survive.

Chapter 6. The Link Between Finance, Investment and Firm Growth

An analysis of enterprise finance would be incomplete without making the link between access to credit and firm performance. In this chapter we study this link in several ways. We begin with a general review of the determinants of entrepreneurship and firm growth in Zimbabwe. We then take a look at how firms finance their investments. We show that firms' investments depend on their access to capital. We then examine how firms handle cash flow fluctuations. We demonstrate that access to credit and contract flexibility are essential to the long term survival of firms. The evidence presented in this chapter is then combined with what we learned in chapters 4 and 5 to construct a typology of manufacturing firms with different financial needs and different dynamic paths. This typology is used in chapter 7 to draw policy implications from our work.

Section 1. Entrepreneurship and Firm Growth

Using the panel data, Hogeveen and Tekere (1994) examine the determinants of entrepreneurship and thus, to a large extent, of firm creation. They construct a data set by pooling panel data on firm owners and workers. Their results show that education and prior experience increase someone's likelihood of becoming a entrepreneur in the sample, while being black or a woman decreases it. Because the panel sample is limited to firms that employ five workers or more, these results fail to reflect the overwhelming participation by blacks and women in myriads of very tiny enterprises (Daniels (1994)). What they show, rather, is that blacks, women, the uneducated, and the unexperienced are less likely to establish firms that employ a minimum of five people and to be in existence long enough to have become part of the panel.[20] The same authors also examine the determinants of firm growth in the number of workers they employ over various periods. They conclude that growth is not persistent: high growth in the past does not necessarily lead to high growth in the future. They find a negative linear relationship between firm size and firm growth, a result that leads them to reject Gibrat's law. A higher level of education of the owner favors firm growth, as does being a man. Black firms grew more slowly immediately after independence, but grew at the same pace as white firms more recently.

Risseeuw (1994) estimates a similar regression with a slightly different set of explanatory variables. He also rejects Gibrat's law and shows that black firms grow at the same rate as others, while female headed firms grow more slowly. He further shows that, as firms age, their growth tends to slow down. Risseeuw emphasizes that, because black firms are on average smaller than white firms, the fact that they grow at the same rate implies that the absolute gap between the two increases. The average black firm may nevertheless grow faster than the average white firm because it is younger. Firms that belong to a group of companies grow faster than average, presumably because they have better access to finance and can pool risk and liquidities within the group. Exporting firms also grow faster.

It is enlightening to compare these results derived from the RPED panel survey with those from the Gemini surveys. These surveys cover a set of firms that is both different and much larger than those covered in the panel. To start with, Gemini is a census of all firms in a set of randomly selected geographical locations, both rural and urban. Two censuses were taken, one in 1991 and another in 1993. This makes it possible to study not only firm entry and firm growth between these two dates, but also firm closures. All activities are covered, with the exception of farming. There is no lower limit on firm size, but firms of more than 50 employees are not included in the discussion of the results by Daniels (1994). As a result, the Gemini sample overwhelmingly consists of very small enterprises in what could be called the informal sector: 97% have fewer than 5 employees and thus did not qualify for the RPED panel. The Gemini surveys thus help us to contrast panel results on larger industrial firms with realities affecting microenterprises in manufacturing, services and trade.

Daniels (1994) studies firm entry, growth and exit between 1991 and 1993, at a time when a massive drought led to a 6% drop in Zimbabwe's GDP, to a significant drop in rural incomes, and to retrenchment in the formal sector. She shows that massive entry took place during the period, but remained concentrated in easy entry, low profit sectors. High profit sectors saw little entry over the period. The burst of firm entry can thus be interpreted as a labor supply response as people scrambled to make ends meet. Two thirds of the new firms were in sectors with incomes inferior to the minimum wage; 88% of them in sectors with an income lower than the average employee earning in the formal

[20]Small panel firms were selected on the basis of the 1991 Gemini sample. Many could no longer be found (Bade and Gunning (1994)).

sector. Many of the enterprises so created may not be viable in the long run. The six leading categories in terms of firm entry are also the leading categories in terms of firm exit. For every 3.6 new firms created between 1988 and 1993, 1 went out of business during that same period. The overwhelming majority of firms -- 99.1% -- is in the hands of Zimbabwean blacks, but the few white, Asian, and mixed-blood owned firms in the Gemini sample are concentrated in sectors where profits are higher and firms larger.

Daniels (1994) further shows that employment creation is dominated by the establishment of new owner-operated small businesses. Existing small firms create little additional employment and grow very little over time. Among the firms employing 20 to 100 workers, only 23% started with fewer than 10 workers. Three quarters of them belong to three sectors only: construction, brick making, and service sectors. Few if any are in manufacturing. Surveyed firms cite access to finance as one major obstacle to their growth. Using the same data, Meed, Mukwenha and Reed (1993) find that only half of the newly started firms survive and that only one out of five surviving firms adds any worker. Taken together, the evidence therefore suggests the existence of a dual industrial structure whereby most microenterprises remain stuck at the level of owner-operated businesses. Reasons for such dualism are discussed, for instance, in Fafchamps (1994).

Taken together, these results indicate that retained earnings play a dominant role in the growth of most firms. Exceptions concern a handful of firms that were either able to raise equity on the stock market, financed by their parent company, or lucky and persistent enough to get a large loan from a financial institution. The virtual absence of growth among very small firms, the high incidence of firm exit, and the role that education and experience play in entrepreneurial success suggest that entrepreneurs differ in competence and performance. Results also show that blacks are less educated and less experienced than whites, that they concentrate in low profit sectors where rates of firm entry and exit are very high, and thus that, as a group, they constitute more risky borrowers. The same appears to be true for women. In their efforts to screen out bad potential risks, lenders are thus likely to use race and sex as indicators of potential repayment performance and to statistically discriminate against blacks and women. This is particularly true for lenders who rely less on legal collateral and more on repeated interaction, like suppliers. Armed with a better understanding of firm growth performance in the Zimbabwean manufacturing sector, we now investigate the relationship between firm growth performance and enterprise finance.

Section 2. Investment and Finance

The way firms finance their investments depends to a large extent on whether they are just entering the business or have already established themselves. Table 1 presents the sources of start-up finance listed by panel firms. Almost three quarters of them used their own savings to finance at least part of the initial investment, half of them exclusively. Own savings is the predominant source of start-up finance for microenterprises and small firms. Friends and relatives make a relatively minor contribution. Bank loans were used at start-up by only 10% of firms; they constituted the exclusive source of start-up finance for two firms only. For many subsidiaries, start-up finance was provided by the parent company.

Table 1. Sources of start-up finance by firm size

Proportion of firms which used:	**Micro**	**Small**	**Medium**	**Large**	**Mean**
Own savings	90%	80%	58%	52%	71%
Friends/relatives	13%	2%	7%	11%	8%
Zimbabwe bank loan	3%	14%	9%	9%	10%
Other	13%	19%	22%	25%	19%
No. of observations	40	64	45	44	200

Source: RPED panel data

As Table 2 shows, there are significant differences among ethnic groups. In particular, black Zimbabweans are less likely than other ethnic groups to have used a bank loan at start-up.[21] These results are consistent with the evidence, reported in chapter 5, that blacks are less well connected with banks.

Table 2. Sources of start-up finance by ethnicity of the owner/manager

Proportion of firms which used:	Black	Asian	White	Other
Own savings	84%	86%	73%	57%
Friends/relatives	7%	9%	11%	0%
Zimbabwe bank loan	3%	14%	15%	7%
Other	21%	14%	11%	36%
No. of observations	58	22	80	14

Source: RPED panel data

The picture is somewhat different for established firms. Panel firms were asked about the most recent investment, if any, that they made in land, buildings, and equipment during the five years preceding the first panel interview. In value terms, investment in equipment accounts for 82% of the answers, buildings for 16% and land for just 2%. Investments in land and buildings are infrequent: only 13% of the panel firms reported investing in land in the last five years, and 28% in buildings (Table 3). Medium and large firms have a higher propensity to invest in land and buildings than smaller firms: only a couple firms with fewer than 100 employees invested in land compared with over one third of the large firms. By contrast, most firms in all size categories made at least one investment in plant and equipment.

Table 3. Frequency of Investment

Proportion of firms investing in:	Micro	Small	Medium	Large	Mean
Land	3%	2%	20%	34%	13%
Buildings	18%	17%	40%	43%	28%
Plant/equipment	80%	77%	89%	91%	84%
No. of observations	40	64	45	44	200

Source: RPED panel data

Retained earnings is the most frequently cited source of funds for investment; it is used by two thirds of the firms (Table 4). In terms of value, however, 'other' sources of funding dominate the picture both for buildings and equipment. The same pattern is repeated for land: only 7 of the 26 firms that reported investing in land used 'other' funding; yet they account for 64% of all investment expenditures on land. A close look at the data reveals that these results are due to a small number of large investments financed through equity, advances from parent companies, and loans from development agencies. In terms of importance, bank loans occupy an intermediate position between retained earnings and 'other' sources: they finance very few purchases of buildings but about a third of all recorded purchases of equipment. As in the case of 'other' sources of funding, investments in equipment financed by banks tend to be larger than those financed through retained earnings.[22] The importance of bank financing may be underestimated as overdrafts are occasionally used to finance small purchases of equipment. Informal finance is not an important source of funds for investment. These results indicate that established firms of a sufficient size find it easier to raise outside funds than start-ups and microenterprises.

[21]This result largely reflects historical realities as many of the panel firms are 15 years old or more.

[22]It is also possible that bank financed investments are bundled up to economize on transaction costs, while investments financed through retained earnings are spread out over time.

Table 4. Source of funds for investment

	Micro		Small		Medium		Large		Mean	
	% use	% value	% use	% value	% use	% value	% use	% value	% use	% value
A. Buildings										
Retained earnings	71%	58%	71%	72%	74%	56%	51%	33%	63%	37%
Personal savings	29%	42%	0%	0%	0%	0%	0%	0%	4%	0%
Bank loan	0%	0%	18%	13%	3%	3%	17%	1%	12%	4%
Other	1%	0%	10%	14%	23%	41%	32%	66%	22%	60%
B. Plant and equipment										
Retained earnings	70%	38%	78%	59%	59%	28%	52%	28%	64%	28%
Personal savings	20%	51%	3%	3%	0%	0%	3%	1%	5%	1%
Bank loan	7%	3%	13%	26%	25%	41%	24%	27%	18%	30%
Other	4%	8%	8%	12%	17%	31%	21%	44%	13%	42%

Source: RPED panel data. 'Percent use' is the unweighted average proportion of the investment financed from a particular source. 'Percent value' is the same average weighted by the value of the investment.

Gunning, Mumvuma and Pomp (1994) further investigate the determinants of investment through regression analysis. They construct an investment variable combining answers to various survey questions, take out depreciation, and divide the result by capital stock. They first run a Tobit regression on the resulting investment rate variable. Results show that the rate at which firms invest is higher when: they operate in the wood sector; their profitability is higher; they are less affected by loan rationing in the formal financial sector; and they are black. Except for the wood sector dummy, however, estimated coefficients are not significant -- not a surprising outcome given the measurement error that was probably introduced in constructing the dependent variable. These results, although not significant, are in line with recent econometric estimations that show the effect of cash flow on investment (e.g., Fazzari and Petersen (1993); Fazzari, Hubard and Petersen (1988); Oliner and Rudebusch (1992)). Gunning, Mumvuma and Pomp (1994) then proceed to estimate a two-limit Tobit model in which firms that were rationed out of formal finance are assumed constrained in their ability to invest. Results confirm that being black has a positive effect on investment and that firms in the wood sector invested more in the years directly preceding the first panel survey. Simulating the effect of relaxing the credit constraint on investment leads to a striking threefold increase in the predicted investment of constrained firms if they were unconstrained (Table 5). Credit constraints thus restrict the ability of some firms to respond to investment opportunities.

Table 5. Simulated Effect of a Binding Loan Constraint on the Investment Rate

	Mean	Standard Deviation	Number of firms
Investment rate in whole sample	28%	70%	127
Investment rate in subsample of loan rationed firms:			
Actual	18%	38%	21
Simulated	61%	23%	21

Source: Gunning, Mumvima and Pomp (1994), p. 91.

These important issues were revisited in the case study survey. We again asked firms how they financed their most recent major investment. But we made a clear separation between bank loans and overdrafts and added specific questions about hire purchase and equity financing. As in the panel survey, personal savings and retained earnings are the most commonly cited source of finance, especially for microenterprises and small firms and for African firms (Table 6). Nearly one third of the case study firms used a loan from a bank or another financial institution; one fourth used a bank overdraft. The numbers are noticeably higher than those reported in the panel survey (Table 4), possibly because we focused on the capital city while 40% of the panel sample is outside of Harare. Hire purchase was used by several firms. Outside equity was little used, but when it was, it helped finance large investments. Other sources,

like personal loans, were used only in a few cases. There are sharp differences across firm sizes. Microenterprises did not use any external finance, while small firms depended to a significant extent on overdrafts and hire purchase. Larger firms have a more varied portfolio of financial sources, with bank loans playing a major role. These findings are similar to those obtained from the panel data. They are also consistent with our earlier findings regarding the limited use of equity finance, hire purchase, and overdraft facilities by African firms and microenterprises. The results suggest that overdrafts play a significant role in financing investments, particularly for small firms for whom the transactions costs of loan application and/or the delays and uncertainties associated with receiving a loan may be prohibitive. As we have seen in chapter 4, however, using an overdraft to finance investment may backlash if it creates a hard core of debt on the firm's bank account.

Table 6. Sources of Finance for the Most Recent Investment

Percentage of firms citing:	All	African	White	Other	Micro	Small	Medium	Large
Personal savings/ retained earnings	48%	75%	42%	33%	100%	57%	46%	27%
Outside equity	6%	0%	9%	0%	0%	7%	0%	5%
Bank loan	30%	25%	33%	22%	0%	0%	55%	46%
Overdraft	24%	17%	21%	44%	0%	36%	27%	22%
Hire-purchase	13%	0%	15%	22%	0%	29%	0%	14%
Other	6%	0%	3%	22%	0%	7%	0%	9%
Nber of observations	*54*	*12*	*33*	*9*	*7*	*14*	*11*	*22*

Source: Case Study Sample. (*) The number of observations varies slightly between questions.

Firms were asked whether they had considered sources of finance other than the ones they ended up using. Most firms had considered a loan from a bank or finance house and, in some cases, hire purchase. The reasons for not using other sources of finance varied among firms. African firms and microenterprises most often stated that they couldn't get access to it. Medium and large firms, and firms owned or managed by whites and other ethnic groups usually said either that they didn't need the other finance, or that the source they chose was cheaper and had a longer repayment period. Other reasons cited were that the application process required too much paperwork or was too slow, and that the firm was not sure it could repay the loan. These results confirm that the rationing of investment finance affects primarily microenterprises and small African firms. What remains unclear, however, is whether these firms are profitable enough to be able and willing to pay commercial interest rates. It was the opinion of some of the bank staff we spoke to that many of these firms cannot afford interest rates as high as those prevailing in Zimbabwe at the time of the survey. To respond to these concerns, the government has made available to small African businesses a line of credit of several million Zimbabwe dollars at an interest rate of 5% per annum. Not surprisingly, there is excess demand for such loans. A few of the case study firms said they had unsuccessfully tried to get one of these loans. We shall get back to these issues in the next chapter.

Table 7. Effect of Access to Finance on the Most Recent Investment

	All	African	White	Other	Micro	Small	Medium	Large
Had to delay due to lack of funds	32%	64%	23%	25%	57%	31%	18%	32%
Had to downsize due to lack of funds	17%	46%	4%	25%	43%	15%	0%	16%
*Nber of observations**	*50*	*11*	*31*	*8*	*7*	*13*	*11*	*19*

Source: Case Study Sample. (*) The number of observations varies slightly between questions.

To explore how financial constraints affect investment, we asked whether firms were forced to delay or downsize their most recent major investment due to lack of funds. About one third of firms stated that they had to

delay and about one sixth that the investment was downsized due to lack of finance (Table 7). African and microenterprises were, again, most likely to delay and downsize. Probit analysis (Table 8) reveals that the effect of ethnicity on investment delay is statistically significant. Manufacturing firms are less likely to delay investment than trading firms, presumably because the former have less flexibility regarding the timing of their investment; e.g., if a new piece of equipment is needed because the old one has broken down, it probably must be replaced immediately to avoid having to shut down (part of) the plant. Among the firms that were forced to delay their investment, more that three fourths reported that the delay reduced the rate of return on the investment. These results suggest that timely access to finance is as important as the cost of finance. One respondent, for instance, told us that he had missed the purchase of a second-hand machine that he needed badly because he could not raise the funds on time. Others had similar stories. The importance of rapid access to credit also explains why many firms use overdraft facilities to finance investments.

Table 8. Probit Regressions on the Impact of Access to Finance on the Most Recent Investment

	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Had to delay	-0.36	**-1.73**	**1.98**	-0.61	-0.00	0.59	-0.34	0.39	0.18	-7.28	48
	0.775	*0.029*	*0.007*	*0.400*	*0.706*	*0.147*	*0.735*	*0.669*	*0.862*	*0.841*	
Had to downsize	1.24	-9.99	9.75	4.99	-0.20	2.87	-6.56	-0.28	-1.53	-8.80	45
	0.979	*0.786*	*0.827*	*0.910*	*0.134*	*0.105*	*0.878*	*0.934*	*0.658*	*0.928*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics.

In addition to questions about the firm's most recent investment, we also asked whether firms had ever been prevented from investing because of lack of finance. Nearly half of the sample firms reported this had occurred to them at least once. Again, African-headed firms and microenterprises were more likely to be affected (Table 9). To understand better why the investment was not made, we asked why firms did not borrow and why they did not raise equity. Most African firms and microenterprises answered the first question by saying they were unable to obtain a loan, and the second by pointing out that they did not know people with money. Large firms and firms owned by whites and other ethnic groups also often cited the inability to obtain (more) credit as the reason for not borrowing, but many simply felt the interest rate was too high. When asked about why they did not raise more equity, none of non-black firms said it did not know people with money. Rather, these firms either didn't feel they needed the outside equity, or didn't want it because of the loss of control and potential for conflicts that would result.

Results therefore indicate that, except for microenterprises and African-headed firms, equity rationing in a strict sense is not the reason why firms rarely use outside equity to finance investments. As we saw in the previous chapter, loss of control and fear of conflicts are the main reasons for not bringing in equity finance. Regarding credit rationing, we saw in previous chapters that it does not appear to be a regular problem for most firms. Yet a substantial fraction of all firms feel that credit constraints have prevented them from investing at some time in the past. Taken together with the qualitative information collected during the interviews, these results suggest that most firms, provided that they are above a certain size, can raise credit to finance equipment replacements and minor investments. But financing major expansions and reorganization of production are problematic for many, leading to frequent delays and downsizing of investments. We shall come back to this issue at the end of this chapter.

Table 9. Access to Finance as Ever Inhibiting Investment

	All	African	White	Other	Micro	Small	Medium	Large
Could not invest due to lack of funds	47%	67%	39%	50%	86%	54%	55%	27%
Nber of observations	*53*	*12*	*33*	*8*	*7*	*13*	*11*	*22*
Why didn't the firm borrow?								
Interest too high	42%	38%	39%	67%	17%	50%	50%	50%
Bank refused	42%	75%	39%	33%	83%	50%	17%	0%
Nber of observations	*24*	*8*	*13*	*3*	*6*	*6*	*6*	*6*
Why didn't the firm seek outside equity?								
Not considered	28%	14%	33%	50%	0%	0%	50%	60%
Fear loss of control	33%	29%	33%	50%	20%	50%	25%	40%
Don't know people with money	28%	71%	0%	0%	80%	25%	0%	0%
Nber of observations	*18*	*7*	*9*	*2*	*5*	*4*	*4*	*5*

Source: Case Study Sample. (*) The number of observations varies slightly between questions.

A probit regression on the effect of access to finance on firms' capacity to invest does not provide strong support for the effect of ethnicity and size on access and investment, although ethnicity has the expected sign (Table 10). The main interest of the regression is rather to bring out another dimension of enterprise finance that we have so far paid little attention to: membership in a group of companies. As Table 10 shows, firms which are subsidiaries of a holding or parent company are significantly less likely to ever have been in a position where they could not invest. What this result suggest is that holding companies play the role of an internal capital market. They are in a better position to assess the viability of an investment by one of their subsidiaries than any external lender. Consequently investment opportunities by subsidiaries are less likely to be forgone than if an external investor -- lender or partner -- had to be convinced of the profitability of the project. The significant role that holding companies play on the ability to invest is thus but another subtle confirmation of the role of information asymmetries in access to finance. Table 10 also shows that older firms are less likely to be constrained in their investments. This result can be interpreted in various ways. First, older firms are more likely to be mature businesses, young firms to be growing businesses that still need capital for expansion. The significant coefficient on age of the firm is consistent with the idea that firm expansion is what is difficult to finance in Zimbabwe. Another possible interpretation, that partially overlap with the first, is that older firms have acquired a reputation and a series of contacts and relationships that make it easier for them to access finance.

Table 10. Probit Regressions on Access to Finance and Ability to Ever Invest

	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Could not invest (1)	**2.791**	-0.70	0.911	0.119	**-0.06**	0.439	**-2.22**	-1.29	**-1.80**	**-2.23**	51
	0.021	*0.290*	*0.200*	*0.881*	*0.009*	*0.326*	*0.034*	*0.188*	*0.084*	*0.041*	
Excess funds (2)	*0.638*	*-0.39*	*-0.57*	***1.502***	***0.038***	***-0.85***	*1.173*	*-0.24*	*-1.01*	***1.505***	50
	0.561	*0.591*	*0.379*	*0.045*	*0.012*	*0.045*	*0.174*	*0.740*	*0.298*	*0.048*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics. (1) 'could not invest due to lack of finance'; (2) 'ever had excess funds'.

As another indicator of whether firms face liquidity constraints, we then asked firms whether they have ever had excess funds that they could not invest profitably within the firm. These surplus funds are typically invested in financial assets or, in some cases, into raiding other firms. Subsidiaries typically revert all their excess funds to a centralized liquidity center with their parent company. Probit analysis (Table 10) shows that Asian firms, older firms, and subsidiaries are more likely to have had excess funds. These results imply that older firms and subsidiaries are

more likely to be cash rich, an indication that they have come to a point where they have exploited all the profitable opportunities available to them. Controlling for age, large firms are less likely to have excess funds. The explanation may be that large young firms are large because they had lots of growth opportunities and thus no time to accumulate excess funds. The fact that Asian-headed firms are more likely than others to enjoy temporary cash surpluses that they invest outside the firm is probably a reflection of their concentration in trade related activities and, for some, of their desire to maintain geographical mobility.

Section 3. Firm Survival and Cash Flow Management

The financial opportunities and constraints that firms face have a large impact not only on their ability and willingness to invest and grow, but also on how well they manage their cash flow and survive liquidity crises. As we have seen in chapter 2 when we discussed precautionary savings and the avoidance of debt, concerns for cash flow variability affect what financial instruments firms choose to use and what investments they make. We thus asked case study firms a series of questions about how they manage their cash flow. Almost all of them declared having experienced cash flow problems at one time or another. Case study respondents were asked whether they considered their cash flow as highly variable or not. Probit analysis (Table 11) indicates that firms in manufacturing (as opposed to trade) and in the textile and garment sector were most likely to describe their cash flow as highly variable. Firms in the textile and garment sector indicated that, in their case, variability is mostly due to seasonality in demand. All categories of firms are susceptible to liquidity problems, though a larger fraction of small firms and textile firms report having been through tough times. 40% of the case study firms at some point went through a major crisis in which the survival of the firm was threatened. In the great majority of crises, firms were forced to downsize their operations, but many of the firms we spoke to have since recovered. Of course, those who succumbed to a liquidity crisis are no longer around to be interviewed.

Table 11. Probit Regression on Cash Flow Variability

	Constant	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Nber. observ.
Highly variable cash flow	-1.415	**1.360**	-0.634	-0.403	-0.003	-0.169	0.445	**0.982**	0.397	48
	0.166	*0.054*	*0.298*	*0.509*	*0.843*	*0.614*	*0.487*	*0.097*	*0.602*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics.

The causes of liquidity problems are both diverse and cumulative in the sense that problems typically result from a combination of negative shocks. The most commonly cited cause of cash flow problems are lack of demand and seasonality in demand. The combination of a drastic drought in 1992 (see chapter 1) and of the liberalization of imports following ESAP in 1991 created difficulties for six of the firms we interviewed. Three said they were caught by rapidly rising interest charges that threw some of them into receivership and sent others searching for new equity to get out of high gearing. Several respondents said they were put in a critical situation when some of their customers failed to pay them, suggesting a little studied route through which difficult conditions in one part of the economy ripple through the rest. Furthermore, to the extent that cases of failed commercial debts get publicized within the business community, a few cases of bad debt can create pessimistic expectations that get reflected in firms' unwillingness to grant trade credit. Many respondents, for instance, indicated that one of their responses to the 1992 drought was to 'consolidate' their trade credit position by reducing their exposure and cutting off numerous marginal customers. Several firms got into trouble when some conditions they had counted on failed to materialize. One firm, for instance, ran into problems after export incentives were cancelled, another when a letter of credit was cancelled. A few firms ran into difficulties when their bank reduced their overdraft facility or refused to continue other short-term facilities. A couple said their problems were due to rapid expansion of the firm, and a few admitted they were the result of bad management and poor planning. Further discussions with respondents indicate that the demand shocks caused by the drought and ESAP have been the major source of difficulty for firms, with rising interest rates and tightening financial constraints adding to the problems for many firms. It is, however, difficult for respondents to disentangle the effects of ESAP and the drought.

We then asked firms how they respond to cash flow problems. The most commonly cited response is to delay payments to suppliers. The flexibility of trade credit thus acts as an important source of cash flow smoothing, helping firms to weather difficult times by shifting some of their liquidity problems onto their suppliers. It also provides strong support for the financial motive for trade credit. The next most often cited response was to rely on the overdraft facility. Over 20 percent of the firms experiencing problems borrowed above their overdraft limit.[23] Slowing down purchases is much more common than reducing production when firms experience normal liquidity problems. This suggests that firms manage their inventories as a way of dealing with cash flow problems, drawing down inventories of supplies and accumulating inventories of products when demand is low. It is only in times of crisis that they cut production and employment. Other strategies for coping with cash flow problems include reducing margins to speed up sales, securing a loan from a bank or parent company, asking customers to pay early (often using cash discounts as an incentive), and reducing the credit available to customers. A few respondents drew upon their own personal savings or managed to obtain a personal loan. A couple of firms confessed they had to delay payment to their workers. Though delaying payments to suppliers was often cited, reducing credit to customers was not, presumably because it undermines the ability of the firm to market its products precisely when demand is low. Reducing credit to customers may also signal that the firm is in difficulty and incite clients to search for new suppliers. This is again consistent with the idea that the sales promotion motive for trade credit is important. In a few cases of major crisis, the firm reorganized its management or rescheduled its loans. One textile firm was, for all intensive purposes, into receivership when we visited it. The firm had been unable to make good on a major investment after ESAP modified relative prices and cut into its profitability. Administrative delays, the escalation of interest rates, and the devaluation of the Zimbabwe dollar only compounded the problem to the point where banks had taken a dominant position in the equity of the firm. The management argued that, had it been allowed to invest on a larger scale, it would have become more competitive after trade liberalization; banks said they had given too much. It is of course beyond the scope of this report to decide who is at fault in this particular case, but it serves to illustrate, in an extreme fashion, how cash flow problems can lead to a firm's demise.

After having asked about specific problems and responses, we turned to prevention. We thus asked a series of specific questions about possible actions firms may take to prevent cash flow problems, or make sure they can deal with them when they arise. Answers are summarized in Table 12. About half of the respondents do keep a portion of their overdraft facility as a reserve; a third hold precautionary savings. White owned firms and firms other than microenterprises are more likely to have an overdraft reserve, presumably because they are more likely to have an overdraft facility. African and Asian firms and microenterprises and small firms are much more likely to hold precautionary savings, perhaps also because they are less likely to have an overdraft facility. Only a small proportion of firms have diversified sources of income that can be drawn upon in an emergency; more smaller firms and Asian firms are in this situation than other firms. About 40 percent of firms claim that they have refrained from expanding their business because of concerns about cash flow; this is more of a concern for African and smaller firms. About one third of the case study firms do not provide customer credit because of their concerns about cash flow -- less among white owned firms and medium sized firms. Few firms request advances from customers for cash flow reasons, but most microenterprises and a substantial fraction of African and wood sector firms do. Delaying purchases is a commonly used strategy by all categories of firms, particularly textile firms. About one third of the case study firms reduce their margins to increase sales in times of liquidity problems -- more so among large firms and Asian firms. In the case of large firms, this may be a reflection of their market power; i.e., smaller and more competitive firms probably do not have much of a margin to cut. Three fourths of the case study firms, without marked differences across firms of different ethnicity, size, or sector, stated that they know someone they could borrow from in the event of an emergency. Subsidiaries of a holding or parent company, however, were much more likely than other firms to state they could rely on their parent company to bail them out of most difficulties.

[23]Overdraft facilities typically specify interest penalties for going over the credit limit. In order to go significantly over the limit, debtors may have to negotiate with their banker -- i.e., get over the phone, explain the situation and plead for assistance. Presumably, bankers' willingness to help depends on whether the firm was refused an extension of the facility in the past.

Table 12. Prevention of Cash Flow Problems

Proportion of firms who:	All	African	White	Other	Micro	Small	Medium	Large
Keep portion of overdraft as reserve	50%	33%	63%	25%	29%	50%	50%	57%
Keep savings as reserve	32%	73%	16%	38%	86%	64%	10%	15%
Has other income sources	18%	27%	10%	38%	29%	23%	20%	10%
Refrain from expanding	40%	56%	39%	25%	57%	42%	40%	32%
Refuse credit to customers	35%	58%	19%	63%	57%	43%	0%	38%
Request advances from customers	15%	36%	9%	13%	57%	23%	10%	0%
Delay purchases	57%	58%	55%	63%	57%	57%	50%	60%
Reduce margin	35%	18%	38%	50%	14%	23%	20%	57%
Know someone who could help	76%	64%	80%	75%	67%	62%	80%	85%
*Nber of observations**	*52*	*12*	*32*	*8*	*7*	*14*	*10*	*21*

Source: Case Study Sample. (*) The number of observations varies slightly between questions.

Multivariate probit regressions were used to test the hypotheses suggested by Table 12. Results show that white owned firms are more likely than Asian firms to hold a portion of their overdraft in reserve, but the coefficients for African firms and for firm size are insignificant (Table 13). Manufacturing firms are less prone than trade firms to keep part of their overdraft in reserve, presumably because trade firms must be liquid to take advantage of good bargains. We do not find that African or small firms are significantly less likely to hold an overdraft in reserve, despite the fact that such firms are less apt to have an overdraft. Subsidiaries often return excess funds to their mother company and thus seldom hold a portion of their overdraft as reserve. The other regressions confirm many of the relationships suggested by Table 12. African-headed firms and smaller firms are more likely to hold precautionary savings. More manufacturing firms also hold precautionary savings, consistent with the fact that their cash flow is more variable. No single factor seems to explain whether firms refrain from expanding their businesses due to cash flow considerations. White headed firms and subsidiaries are significantly less likely to refuse credit to clients, a confirmation of the results we obtained earlier. Firm characteristics fail to explain whether firms request advances, in part because few firms do so. Textile firms are more likely to delay purchases. Larger firms are more prone to reduce their margins when necessary. Firms which have been around longer are more likely to know someone they could borrow from in an emergency, presumably because they have been around long enough to develop connections with prosperous businessmen and women.

Table 13. Probit Regressions on the Prevention of Cash Flow Problems

	Const.	Manuf. dummy	African owner	Other owner	Age of firm	Size of firm	Food dummy	Textile dummy	Wood dummy	Subsi-diary	Nber. observ.
Overdraft as reserve	1.503	**-1.81**	-0.54	**-1.98**	0.002	.563	-0.72	-0.77	-0.93	**-1.23**	51
	0.133	*0.006*	*0.331*	*0.007*	*0.893*	*0.138*	*0.276*	*0.194*	*0.281*	*0.031*	
Savings as reserve	-0.23	**2.93**	**2.73**	1.62	0.03	**-2.34**	1.42	0.36	**-4.17**	-0.39	49
	0.847	*0.043*	*0.004*	*0.128*	*0.222*	*0.008*	*0.173*	*0.659*	*0.024*	*0.695*	
Refuse credit	0.084	-0.67	**1.78**	**1.37**	0.00	0.20	**-1.48**	**-1.27**	-0.20	**-1.24**	50
	0.938	*0.379*	*0.005*	*0.035*	*0.961*	*0.595*	*0.077*	*0.076*	*0.824*	*0.071*	
Reduce margin	-1.51	-0.60	-0.41	0.02	0.00	**0.70**	-0.22	0.13	0.34	-0.38	50
	0.110	*0.323*	*0.525*	*0.975*	*0.711*	*0.067*	*0.743*	*0.830*	*0.689*	*0.461*	
Know someone	-1.99	**2.51**	-0.48	0.33	**0.06**	-0.38	-0.59	-0.14	-0.13	6.89	48
	0.189	*0.039*	*0.478*	*0.657*	*0.024*	*0.377*	*0.555*	*0.863*	*0.904*	*0.872*	

Source: Case Study Sample. Asymptotic significance levels for two-sided t-test in italics.

Taken together, these results confirm and strengthen many of our previous findings. They show that the precautionary motive for saving is stronger among small and African firms, and for firms facing more cash flow variability (i.e., manufacturing firms), a finding consistent with predictions made in Chapter 2. They demonstrate the importance and flexibility of trade credit, and support the financial and sales promotion motives for trade credit. They again bring out the importance of overdraft facilities. They show that subsidiaries of holding companies have an important source of insurance against cash flow problems as well as finance for investment. They indicate the minor role that other sources of credit (moneylenders, personal loans) and equity capital play in dealing with cash flow problems. Besides confirming our earlier findings, these results also demonstrate the great importance of cash flow management and the value that financial opportunities represent for preventing and coping with cash flow problems. It is in their effort to deal with unexpected external shocks that firms find themselves most hurt by credit constraints like overdraft ceilings, which is why the presence and flexibility of trade credit are so important. It is therefore likely that financial constraints, even when they do not directly prevent firms from undertaking profitable expansionary investments, may indirectly retard them because firms worry about being able to deal with the increased risk associated with expansion. Because firms cannot find insurance against day to day liquidity problems and because overdraft facilities perform this task only imperfectly, long term investment opportunities may be missed.

Section 4. A Synthesis of Enterprise Finance in Zimbabwe

A Typology of Firms

We now attempt to summarize the evidence presented in this report by drawing a typology of firms with respect to their access to finance. We continue weaving into our discussion a multitude of qualitative insights collected during the interviews. At the bottom of the firm hierarchy are microenterprises who, for the most part, receive no credit from suppliers and financial institutions. Small African firms seem particularly disadvantaged. Some of them manage to collect advances from customers in order to cover the cost of raw materials, but the practice seems less prevalent in Zimbabwe than in, say, Ghana and Kenya (Cuevas et al. (1993); Fafchamps et al. (1994)). The middle group of small and medium size firms have access to three, relatively simple sources of external finance: bank overdrafts, hire purchase, and supplier credit. The top half of this category may also have access to other forms of short term domestic credit like bankers acceptances. As we shall see in chapter 5, the three systems -- short term credit from suppliers, line of credit from commercial banks, medium term credit from finance houses -- are linked through an extensive reputation mechanism whereby serious failure to comply with a particular lender affects one's ability to continue receiving credit from the others.

At the top of the hierarchy are not one but several, partly overlapping, categories of firms. Most of them are large by Zimbabwean standards but they differ in their access to specialized, often cheaper sources of external finance. One type of finance is medium and long term loans. As we saw in chapter 3, Zimbabwean commercial banks are hardly involved in lending to manufacturing firms other than on short terms. To access medium to long term finance, firms must turn to other sources like finance houses, merchant banks, and development banks. Many of them typically

economize on screening and monitoring costs by focusing on a few, large scale investment projects. As a result, medium and long term loans tend to disproportionately go to large firms who can justify large enough investments. Smaller long term investments typically fall by the wayside and have to financed out of retained earnings or short term credit.

Another type of external finance that, in practice, is available only to a specific category of firms is off-shore borrowing. With Zimbabwean domestic interest rates at 35-40% at the time of the case study, and the Zimbabwean dollar holding its own since January 1994, borrowing off-shore at 8% or so has become extremely tempting. The foreign exchange risk, however, is substantial. As a result, only firms who either are large enough to withstand a further devaluation of the Zimbabwe dollar, or who generate their own foreign exchange can avail themselves of this opportunity without undue risk. For intermediate size firms, exporting has thus become a *de facto* condition to access off-shore financing. One caveat should be kept in mind: those who export to South Africa but borrow in hard currencies continue to face a substantial foreign exchange risk as they are not protected against a devaluation of the rand. One firm in our sample, for instance, got badly burned in this fashion when the Zimbabwe dollar actually appreciated against the rand over most of 1994.

Outside equity financing remains confined to a very small number of firms: there were only 70 Zimbabwean manufacturing firms or so quoted on the Zimbabwe Stock Exchange (ZSE) at the time of the case study. All were large, well known firms, many of them associated with popular products and brands. For those happy few who successfully floated stock on the ZSE, however, the amount of external finance that can be mobilized is substantial. One of the case study firms, for instance, doubled its equity and launched a major expansion of its activities because it was able to access the stock market. Encouraged by this experience, it was considering further rights issues in the future. Right now, several analysts of the ZSE argued, new flotations are dominated by firms attempting to clean up their balance sheet and get out of overgearing. The resulting backlog of uninteresting issues has turned some investors away from the market. Once this backlog is gone, however, the ZSE offers a promising avenue for large firms to finance major expansion projects.

The last special category of firms we want to talk about are those who belong to a group or a holding company. Because groups of firms and holding companies operate in effect like a mini capital market, members of a group find it easier to access finance for expansion projects or for crisis management. Such firms then can expand more easily if they so wish, or withstand shocks if they come under fire, even when on their own they would be too small to access project finance or equity investors. It therefore should come as no surprise that holding companies account for a major proportion of the value added generated in Zimbabwe's private sector. During discussions with respondents, it became clear that the importance of holding companies in the Zimbabwean economy continues to grow. Certain respondents said that their firm had recently become member of a holding company, others that their holding company had been rapidly buying companies and growing in size. As far as we can judge from our limited vantage point, the prominence of holding companies is unlikely to end in the near future. If anything, the expansion of the ZSE can only benefit holding companies and their subsidiaries because groups of firms are in a better position to raise money on the stock market and finance their expansion than isolated enterprises.

A small but promising category of firms are those promoted by Venture Capital of Zimbabwe and other similar organizations. Here, small and medium size firms have found access to outside equity through an institutional innovation that enables an outside investor to closely monitor start-up firms and prop them up until they are viable. The few firms we interviewed in this respect clearly benefited from the arrangement, and the availability of capital at critical periods of their development enabled them to survive growing pains. The downside of the arrangement is not negligible, however: loss of control and external interference. Managers who go for venture capital must be prepared to have a 'big brother' constantly looking over their shoulder, patronizing them somewhat and scrutinizing their every little mistake. This is the price to pay to compensate for the lack of experience and reputation these firms begin with.

There are, also, a number of missing categories, that is, categories that fail to exist in Zimbabwe today. There are, for instance, no firms that float corporate bonds, and no firms that sell derivatives. Developing markets for such instruments could undeniably increase the range of financial instruments available to the most sophisticated of Zimbabwean firms. We shall come back to these issues in chapter 7.

Firm Dynamics

Access to finance at the right time and the right quantity affects firms' ability to grow and survive. The financial structure is thus an important determinant of industrial structure, i.e., of the size and vintage distribution of

firms. We argued that there exists in Zimbabwe a hierarchy of firms with respect to their access to external finance. We now discuss how firm dynamics varies at different levels in this hierarchy.

Without doubt the firms whose potential is most restricted by difficult access to external finance are microenterprises. In this, Zimbabwe is no different from other places (Fafchamps (1994)). Entry for microenterprises is often easy (see, however, Daniels (1994) for some caveats), but growth and survival are not. Most microenterprises live a precarious life, vulnerable as they are to liquidity shocks. In their case, bank overdrafts and contractual flexibility cannot be used to smooth temporary cash flow problems. It is therefore not surprising to note that the survival rate among microenterprises is indeed low. Only the most fortunate ones accumulate some personal savings that can be used as buffer stock against temporary difficulties. In order to grow, microenterprise must graduate into the middle category, that of small and medium size firms, those that have a bank overdraft and supplier credit and that can use hire purchase if they choose to.

The hurdle microenterprises must pass in order to graduate is, however, so difficult that very few succeed. In section 1 we saw that only a small proportion of small and medium size firms grew out of microenterprises. The hurdle is difficult to jump over because several conditions must be satisfied more or less at the same time for graduation to be realistic. Because it belongs to a group of risky borrowers, a microenterprise cannot typically obtain a bank overdraft without providing collateral. As we have seen, the form of collateral favored by banks is a mortgage on real property. In order to establish a mortgage, the borrower must have a title. Many Africans, however, do not possess a title on their land. This is certainly true of those who come from communal areas because the titling of communal land is not allowed by Zimbabwean law. Land titles are also missing in many growth points because land surveyors cannot cope with the task of surveying all the land to title. Even in Harare, Africans who live in the townships often have no title on their home. One respondent, for instance, stated he was turned down for credit by his bank because he has no title on his home, but could not get a title because he did not have the money to pay for the costs. One possible solution to these problems is to make land titling cheaper and more widely available. This measure, however, may be insufficient to deliver credit to many promising micro-entrepreneurs who do not own land or do not want to put their home at risk; forms of contractual security other than land title may have to be found. We get back to this issue in the next chapter.

Even if a microenterprise has collateral, banks may turn them down for an overdraft. In the days of regulated interest rates Zimbabwean banks used to argue that they could not cover the costs of screening and processing small borrowers because rates were not remunerative enough. Now that rates have been liberalized some of the bank staff we interviewed argued that small borrowers could not afford high interest rates. It appears as if microenterprises can never win! It remains, of course, that as a group they are risky borrowers and that bankers' suspicions will for a long time to come take the form of statistical discrimination. To combat such discrimination, ambitious and promising micro-entrepreneurs must be able to distinguish themselves from the rest. One way they can potentially do so is by building a good track record with the bank and with other lenders. By making regular withdrawals and deposits on their bank account and by not bouncing checks, borrowers demonstrate they ability to handle their personal finances. Banks may then use this information as signal of good character. Ironically, as we saw in chapter 3, many individuals prefer to put their personal savings either with one of the building societies or on a Post Office savings account. These financial institutions, however, do not open lines of credit to their clients. This is particularly damaging because, as we saw in chapter 4, microentrepreneurs are more likely to have a savings account than a checking account. The lack of savings and loans financial institutions in Zimbabwe thus imposes an additional cost to micro-entrepreneurs who wish to build up a track record with a potential lender: they pretty much have to put their savings on a less remunerative savings account in a commercial bank. Few micro-entrepreneurs seem to be aware of this state of things, however. Furthermore, even with a good track record a small borrower remains at the mercy of the whims of the bank's loan officer who may still find the risk too high. Indeed, as we saw in Chapter 4, many microenterprises have a bank checking account though few have obtained an overdraft facility.

Another way microenterprise can potentially raise finance and at the same time establish a track record is through supplier credit. We saw that many suppliers are willing to grant limited credit to customers who have satisfied a trial period of several months of regular purchases. What suppliers do then is typically to set the customer's line of credit to his or her level of purchases over the preceding months. By paying regularly and progressively increasing purchases a client can then gradually increase the line of credit. The process is very gradual and can take several years but it enables the firm to establish a track record that is publicly available through credit reference and credit information services. A firm who has behaved in a satisfactory manner with one supplier can then secure credit from

others, etc. A good reputation with suppliers also helps the bank decide in favor of a bank overdraft and the finance house to decide in favor of a hire purchase loan. An essential element of the reputation mechanism, however, is firm registration with the Registrar of Companies. Although registration is not a prerequisite for any form of lending, it often facilitates the operation of the reputation mechanism because registration makes public crucial information on the firm, like the address of its owner(s) and the level of its capital. It also makes it easier to trace other relevant information like the number of its employees, involvement in court cases, etc. Although registration *per se* does not provide immediate access to finance, in the long run it is probably beneficial. While there are significant costs to registering one's business (e.g., fees, preparation of balance sheet), the benefits are uncertain and only materialize in the distant future.

To sum things up, the path that leads from the micro-enterprise category to the small and medium firm category is narrow and treacherous. What compounds the difficulty is that, without bank overdraft and credit from numerous suppliers, a firm is a worse debtor. Indeed, contractual flexibility is, as we have seen, a major way through which firms smooth their cash flow. When the firm has a single creditor, that creditor alone has to bear the burden of whatever shock affects the debtor. This tends to make the debtor a worse payer and consequently makes it more difficult for a debtor with a small number of creditors to establish a good reputation. One should therefore not be surprised that so few microenterprises succeed to graduate into the small and medium size category. These realities also help one understand the prevailing ethnic mix in Zimbabwean entrepreneurship. If a particular group, for historical reasons, establishes itself in business, it becomes easier for other members of that group to succeed in business as well: information about how lenders make credit assessments circulates more freely within the group, so that candidate entrepreneurs can adapt their behavior accordingly; reputation spreads within a group that comprises other businesses and thus potential suppliers and trade creditors; and the wealth accumulated by members of the group can be used, through inheritance or personal guarantees, to ease newcomers' access to bank credit. For all these reasons it is easier for members of that group to jump over the initial hurdle that slows down the growth of so many microenterprises and to immediately -- or at least rapidly -- join the ranks of small and medium size firms. The logic of this argument suggests that once a critical mass of Zimbabwean blacks have succeeded in business, it will be easier for others to join in. How to build that critical mass is discussed in the following chapter.

Let us now turn to the second category of firms, the small and medium size firms with access to bank overdrafts, trade credit, and hire purchase finance. Although their situation is much better than that of microenterprises, it is not without flaws of its own. Firms in this category typically find it much easier to survive for the reasons we already talked about -- bank overdraft and contractual flexibility. This in part explains the high average age of Zimbabwean firms in this category. But those who perceive expansion opportunities often find it difficult to grow: many projects are deferred or downsized due to lack of funds; many investments are not undertaken because firms are reluctant to assume fixed debt obligations in order to finance them, and refuse to endanger their control and peace of mind by bringing in equity partners. Shifting from one line of business to another is also difficult as it means establishing trade credit relationships with new suppliers. Fortunately, in doing so, Zimbabwean firms are at an advantage compared to Ghanaian (Fafchamps (1994)) or Kenyan firms (Fafchamps et al. (1994)) because they are assisted by the existence of a sophisticated reputation mechanism. The formal reputation mechanism through credit reference bureaus and information sharing among financial institutions, however, is largely tailored to the needs of existing firms; it benefits less the firms which, under any circumstance, have a harder time, namely new entrants. Word of mouth, personal contacts, and the backing of friends and relatives are what determines the success or demise of new entrants at the small and medium size level.

With luck and effort, small and medium firms can graduate into higher categories. Several of the firms we spoke to managed to raise off-shore finance. To do so, they must be big enough to become customer of a merchant bank, and they need to export if they wish protection against foreign exchange risk. Exporting, however, is not without its own hurdles which are beyond the scope of this report. Project loans are another option open to entrepreneurs who dedicated and patient enough to convince one of the few sources of long term finance to invest in their project. The delays involved are significant and the administrative costs non-negligible, so that the investment opportunity must be one that nobody else can jump on before the loan application goes through. Opportunistic investment to preempt others is by definition ruled out. Of course, one could argue that there is no aggregate efficiency loss if somebody's idea gets taken up by someone else who happens to have the money to use it. But many potential investors may refrain from circulating information about their ideas, through a project loan application or otherwise, in the hope that one

day they will be able to take advantage of them with their own finances. One can only suspect that, as a result, investments that would benefit Zimbabwe are either delayed or postponed forever.

At the top of the industrial hierarchy, a few fortunate firms face few financial constraints. They can access external equity by floating shares on the Zimbabwe Stock Exchange (ZSE). They can pool resources with other firms to form holding companies which can then raise credit and equity more easily. For this category of firms, what is constraining is not their inability to raise external finance, but the thinness of the market they can tap into and the paucity of financial instruments they can use. In the absence of corporate bonds, for instance, there is no secondary market through which institutional investors could invest in long term corporate financing. Without mutual funds, small private investors find it difficult and risky to buy into equity. There is no market for derivatives, for futures on commodities or foreign exchange. There is no secondary market for mortgages. One could argue that these markets do not exist because there is no demand, because Zimbabwe has not reached a sufficient degree of sophistication for these financial markets and instruments to emerge on their own. There is probably some truth in this argument, but, as we argued repeatedly in chapter 2, one must beware of institutional determinism. The 1993 boom in the ZSE serves as a vibrant illustration that relatively minor changes in the institutional setup can have real effects on the financial structure. With this as introduction we now turn to the policy implications of our work in Zimbabwe.

Chapter 7. Policy Implications

We have seen that enterprise finance in Zimbabwe is sophisticated by African standards and that the problems manufacturing firms face in financing investment and cash flow management are not as severe as elsewhere (Cuevas et al. (1993); Fafchamps et al. (1994)). Yet, the present situation is far from perfect and there are many areas in which improvements can be made. In this chapter, we draw a series of policy implications from the evidence we collected. In no way should these implications be construed as definitive. Before they can be implemented they must be carefully examined by Zimbabwean and foreign experts. Moreover, they will not solve all the problems of enterprise finance in Zimbabwe, or anywhere for that matter. Financial markets are imperfect because of information asymmetries and enforcement problems. No policy action can remove the roots of market imperfection. If anything, the implementation of government policies suffers from information and enforcement problems of their own. What policy action can nevertheless do is to introduce institutional innovations that mitigate some of the problems raised by financial intermediation, and to redress the most glaring consequences of its imperfections. The macro-economic environment must also be such that finance is available to manufacturing firms at the aggregate level, and that they have adequate incentives to invest and expand into socially desirable activities.

The first section of this chapter is devoted to institutional innovations for small, medium, and large firms. The second section examines in detail the predicament of microenterprises and African-headed firms. Many of the recommendations we make derive from our understanding of where the problems are and how they can be tackled. There probably are other institutional innovations we did not think of. The third section is a brief discussion of macro-economic and industrial policy. These issues are largely beyond the scope of this report and our recommendations in these areas remain general. But they are important: many of the institutional modifications we suggest to improve enterprise finance can only bear fruit if more finance is made available to enterprises as a whole, and if enterprises perceive the need to invest and expand beyond what they are currently doing.

One issue we do not address in this chapter is whether Zimbabwe has the right kind of banks or not. This is largely a moot issue since the chances of a revolutionary change in the nature and behavior of Zimbabwe's three main commercial banks is, at best, remote. We do, however, discuss the nature of its savings and loans institutions (or lack thereof) and make some suggestions on how reform in this area could help channel more credit toward microenterprises and small firms.

Section 1. Institutional Policy for Small, Medium and Large Firms

At the end of the previous chapter, it was argued that firms in different categories face different kinds of difficulties. The situation of microenterprises and African-headed firms, in particular, was found sharply contrasted with that of other small, medium and large firms. There also were significant differences within the latter category. Even though more fortunate than microenterprises from an enterprise finance point of view, small manufacturing firms were shown to have less access to certain types of financial services and markets than large firms. Large corporations themselves were not exempt of problems, particularly regarding the limited sophistication of available financial instruments. Finally, expanding firms were often limited in the pace and size of their investments by financial considerations. Although there is considerable overlap between these various issues, we address the needs of each of these categories in turn. We begin with small and medium size firms, continue with large corporations, and finish with rapidly expanding and contracting firms. The plight of microenterprises and African-headed firms is reviewed in the next section.

Institutions for Small and Medium Size Firms

Small and medium size firms raise most of their finance in the form of overdraft facility, trade credit, and, to a lesser extent, hire purchase. How can the finances of these firms be improved? For a number of firms, access to bank overdrafts can be facilitated by enlarging the stock of titled urban property.[24] This seems to be true in particular in Harare townships, secondary towns, and so-called 'growth points'. One of the main bottlenecks appears to be the

[24]Although advocated by some of the people we spoke to, the titling of rural land (in particular, communal land) raises very different issues that we do not wish to delve into here. For a discussion, see for instance Atwood (1990) and Platteau (1992).

small number of qualified surveyors available and the resulting high cost of securing a title. These difficulties should be amenable provided new surveyors are trained and facilities expanded. One may also wish to examine whether the use of satellite imaging could reduce the costs of land surveying.

Another often used form of contractual security, notarial bonds, could also be improved. Zimbabwe follows the Dutch Roman Law and thus does not allow liens and other contractual obligations to follow movables into the hands of a new owner. This tends to weaken the security value of a notarial bond. Short of revising one of the major tenets of Dutch Roman Law, however, this weakness cannot be accommodated within the existing system. What can nevertheless be done is to enforce the seniority of notarial bonds, that is, to prevent a debtor from pledging his movables to several creditors. A way to achieve this is to institute the registration of notarial bonds.[25] With this system, a debtor would find it harder to issue a second notarial bond against the will of the first creditor. It may seem paradoxical to restrict debtors' freedom of movement to improve their financial situation. But the reason why access to finance may be restricted is precisely that, in the current system, creditors cannot prevent opportunistic behavior by some. Because lenders are unable to discriminate between honest and opportunistic borrowers, the security value of the notarial bond fails to achieve its potential. As a result, good borrowers are penalized even though they do not feel the need or inclination to pledge the same collateral twice. The registration of notarial bond should enable good borrowers to distinguish themselves from potentially opportunistic borrowers and thus enhance efficiency in the delivery of credit.

Hire purchase is important in Zimbabwe and could become more important in other African countries as well. The success of hire purchase derives from the fact that the good being financed is its own collateral. The legal form the security takes is a simple one: the lender is or becomes the owner of the good. As such, the lender can repossess the good from the borrower or from anyone who may have fraudulently purchased it from the borrower. The security value of hire purchase is highest when two conditions are satisfied: the ownership of the good used as security is officially registered; and the good can easily be liquidated by the lender with little loss of value. Registration makes it difficult for the borrower to dispose of the item without falsifying ownership documents and thus incurring criminal penalties. This explains why hire purchase is most popular for the movable item by excellence, namely, vehicles. Ease of liquidation depends on the existence of a strong secondary market for used equipment. In Zimbabwe, this is achieved through well attended public auctions. Specialized equipment and large pieces of machinery are not good candidates for hire purchase because the secondary market is too thin and their resale value is highly uncertain. Hire purchase works best for small standardized equipment and machinery -- cars, trucks, farm equipment, simple textile looms, industrial sewing machines, etc.

Hire purchase is also a popular way of financing consumer durables. In view of protecting Zimbabwean consumers against their own lack of foresight, the government has instituted certain restrictions on hire purchase contracts. In particular, the duration of the contract must be three years and the downpayment must be 40% of the value of the sale. These restrictions, although sensible for consumer durables, often are too constraining for productive equipment. As mentioned in chapter 3, certain financial institutions have sought to circumvent these restrictions by using *sui generis* lease agreements. The widespread use of such contracts is currently held back by taxation issues. We recommend that these taxation issues be resolved so that more flexible lease agreements can be used.

The third main type of credit small and medium firms have access to is trade credit. This form of credit, however, is largely decoupled from financial credit and the collateral value of receivables is little used. Trade bills have fallen in disfavor, partly, we were told, because of past abuses. Furthermore, bill discounting facilities offered by banks typically deduct discounted bills from the client's overdraft ceiling. Consequently, the discounting of trade bills does not serve as an independent route to external finance. Post-dated checks, which elsewhere constitute the basis of an active curb market (see, for instance, Biggs (1991)), are not commonly used in Zimbabwe. Debtors in arrears typically offer post-dated checks to their creditors as a sign of good faith when asking for further delay, and as a form of commitment that they will pay by the due date. Indeed, a bounced check constitutes a convenient legal basis to secure an expeditious judgement. The only form of financial arrangement in which receivables are used as stand-alone security is factoring. What distinguishes factoring from bill discounting is that all the receivables of the firm are discounted, independent of the firm's need for funds, for a set period of time, typically, three to four years. The borrower also loses the ability to pick and choose which debtor to discount. Factoring is not widespread, but it was used by several of the firms we spoke to. All said that it improved their ability to manage their cash flow and that the

[25]The creation of a Registrar of Notarial Bonds is currently under discussion among financial institutions and the government.

backing of the factor had significantly reduced payment delays by their customers. Factoring is particularly appealing for small and medium firms which have little bargaining power to enforce prompt repayment by large, monopsonistic customers. One can only surmise, however, that the burden of late payment is then passed onto firms that do not use factors. There does not seem to be institutional impediments to the use of factoring in Zimbabwe. The practice could be encouraged, however.

Orders are occasionally used to raise external finance, particularly when they are large and come from well known, established buyers. Tenders from the Central Purchasing Agency can also be used as security. Orders, however, constitute an imperfect form of collateral because the recipient of the order may be unable or unwilling to complete it. If the order is not completed to the satisfaction of the buyer, the borrower will not be paid and the lender will not recover his or her money. Lenders are therefore reluctant to finance firms solely on the basis of an external order. They usually require other forms of security and assess the borrower's ability to complete a large order on time and to the satisfaction of the buyer. The most widespread use of orders as security is in pre-shipment export financing. In Zimbabwe, this form of finance can for the most part only be accessed through merchant banks. Since merchant banks cater only to the needs of large corporate clients, this means that small and medium size firms typically have no access to pre-shipment financing. Filling this lacuna is essential before small and medium size firms can actively take advantage of new export opportunities opened by structural adjustment.

Other forms of government interventions are also required in foreign trade finance. Since the Reserve Bank of Zimbabwe discontinued its foreign exchange guarantee scheme, exporters who wish to import raw materials and equipment on off-shore credit currently must pay extremely high premia to insure themselves against foreign exchange risk. While large firms and firms which are already exporting may be able to withstand such risk, this is not typically the case for small and medium candidate exporters. The establishment of a foreign exchange guarantee fund for businesses willing to expand into manufacturing and other non-traditional exports could only enhance small and medium firms' desire to take on exporting. Post-shipment finance could also be made more readily available, particularly if it is coupled with export credit insurance. Finally, the Zimbabwean government and financial institutions may investigate the possibility and desirability of making off-shore finance available in Rand. In the long run, the economies of Zimbabwe and South Africa are destined to become more integrated. Yet, exporters to South Africa can currently secure off-shore financing only in hard currencies even though their exports receipts will be in Rand. This forces them to shoulder a significant currency risk. One of our respondents, for instance, was put into a difficult predicament as a result of the depreciation of the South African currency.

Institutions for Large Corporations

The difficulties large corporations face in accessing external finance are different in nature from those faced by small and medium size firms. The existence of an active stock market in Zimbabwe makes it possible to envisage extending the existing system in several directions. These extensions will undoubtedly require that the physical infrastructure on which the stock exchange currently rests be upgraded and modernized and that the number of authorized traders be expanded.[26] The first step is to float some interesting shares on the market as to increase the stock of securities available for trade. Some people we spoke to, for instance, suggested that the government put some of its shares in Delta onto the market. These are, no doubt, sensitive political issues with which we do not wish to interfere, but what is clear is that more interesting stuff on the stock market would raise the level of activity and make participation to the stock market easier to corporations wishing to expand.

The time may also have come to consider creating new financial instruments. Derivatives were on the lips of many of the people we spoke to. The idea is that by adding to a standard debt contract the option to participate in the debtor's future benefits, one may increase the profitability of lending and thus make more credit available. We do not have any strong disagreement with this view, but derivatives may prove to be too delicate to leave the rarefied confines of high Zimbabwean finance. To open the market for long term credit, there may be a simpler, more promising instrument: the corporate bond. There is currently no secondary market for long term private credit in Zimbabwe. Financial institutions who lend to corporations cannot, as they do with government bonds, resell their claims to other investors. As a result, pension funds and insurance companies end up putting their money into government securities and, more recently, into the stock market; none of it goes to finance medium term credit to the

[26]According to one respondent, there are only 7 traders on the ZSE, all operating without computers.

corporate sector. Yet, creating a market for corporate bonds should not, given the level of financial sophistication achieved by Zimbabwe, present major difficulties. Merchant banks, who already operate as underwriters for many stock market flotations and as intermediaries for institutional investors in the case of long term mortgages, could easily take on the additional function of underwriting and circulating corporate bonds. This would enable institutional investors to diversify their portfolio into medium term instruments. These instruments, unlike mortgages but like government bonds, would be liquid and could be traded in a secondary market, a feature that should greatly increase their attractiveness.

Another institutional innovation for which the time may have come is the mutual fund. To our knowledge, there is currently no mutual fund in which private Zimbabweans can invest their savings. This lacuna increases the risk and effort investors must incur in order to participate in the stock market. As a result, investing in the stock market probably remains confined to a small number of private individuals. Mutual funds seriously reduce the risk of stock market operations through portfolio diversification. They also lower transaction costs as many investors delegate the management of their finances is to a single specialist. Mutual funds would of course not limit themselves to securities quoted on the stock market. They could include money market funds, corporate bonds funds, government and AMA bonds funds, and combinations of the above. Before mutual funds can become a reality, however, a Mutual Funds Act is needed that sets up some guidelines as to the operations and capitalization of such funds, and protect private investors against abuse.[27]

Institutions for Start-Ups and Rapidly Expanding Firms

The institutional innovations suggested above should help all firms gain better access to external finance. They may, however, be insufficient for start-ups and rapidly expanding firms. As should be clear from the analysis presented in chapters 3 to 6, start-up firms have the hardest time getting access to external finance. This is why so many firms begin on the sole financial resources of the initial investor, and why therefore in a country like Zimbabwe where many people have little personal wealth, so many firms also are microenterprises. It would be naive to advocate the free distribution of credit to whoever wishes to establish a new enterprise. The potential for abuse would indeed be enormous and few loans would probably be repaid. What then are the alternatives? We discuss several of them in the next section devoted to microenterprises. Here we wish to address two of them that are suitable for larger firms, namely, venture capital and project loans.

Venture capital is a reality in Zimbabwe. As mentioned at the outset of chapter 4, we made an effort to meet with some of the entrepreneurs who got started thanks to venture capital. Their experiences were all positive in the sense that venture capital allowed them to survive initial miscalculations and mishaps and to grow to become viable small and medium size enterprises. The price to pay, however, is fairly high in terms of loss of independence and pride. Venture capital works because the venture capitalists is intimately involved in the everyday conduct of the business. Close range monitoring is what substitutes for collateral and social capital. Firms who receive venture capital are kept on a short financial leash, but they also receive fatherly advice and support in bad times. The venture capitalist is also involved in directing the course of the firm toward profitable activities, for instance by intimating the firm to abandon a project or take on another. Because monitoring is time consuming, there is a limit to the number of firms a single venture capitalist can optimally oversee. There is thus plenty of room in Zimbabwe for other venture capital firms to step in. In due course, venture capitalists may be able to raise funds from institutional investors and thus serve as intermediaries to channel external finance toward start-ups. The success of venture capital in Zimbabwe ultimately lies in the rapid growth of some sectors of manufacturing and services, which in turn probably on Zimbabwe's ability to export manufactured goods and other non-traditional products. In other words, if a few people get rich overnight through venture capital, more venture capital will be forthcoming.

Project lending is another area for possible expansion. We saw in chapter 3 that commercial banks do not see it as their business to help their clients expand. Merchant banks a more pro-active in helping their customers secure project financing, but their only cater to large corporation. Moreover, they are reluctant to tie up their own money in long term lending and typically act as intermediary for other long term investors. Although there are a number of development banks operating in Zimbabwe, they seem to be difficult to reach and appear to have had a

[27]According to one of the people we spoke to, mutual funds are on the drawing board of several financial institutions. The only remaining impediment to their being launched is the absence of legal framework.

minimal impact. One respondent even got into serious financial difficulties as a result of a development bank's delays in disbursing funds. Although an in depth analysis of development banking in Zimbabwe is beyond the scope of this report, we can safely say that, should many new investment opportunities arise in manufacturing, Zimbabwe would be ill prepared to respond to the demand for project financing.

Institutions for Contracting Firms

Just as some firms expand, others contract. What happens when a firm must abruptly reduce its activities affects lenders' expectations regarding debt recovery, and thus their willingness to lend. Following ESAP and the 1992 drought, Zimbabwe has an unprecedented series of failures among major companies. Banks have responded by taking a closer interest in the running of distressed companies. Because bankers are not in the business of managing large corporations, however, they seldom feel qualified to do so well. As a result, some voices have asked for a formal receivership status akin to Chapter 11 in the U.S.A. This would allow judges to nominate an external manager with the power to reorganize the company and change the management. There was no consensus on this issue among the people we spoke to and we had no time to investigate it in detail. But it is possible that a modification to bankruptcy law could help firms, especially medium and large companies, to access external finance. This issue deserves more investigation.

Section 2. Microenterprises and African-Headed Firms

In the preceding section we examined what institutional innovations can facilitate the flow of external finance to small, medium and large manufacturing firms. Our recommendations were all directed at helping the existing system work better by removing impediments erected by information asymmetries and enforcement problems. There recommendations, if implemented, would nevertheless be largely ineffective in assisting microenterprises. Moreover, they fail to address the specific difficulties African-headed firms face in Zimbabwe today. In this section, we propose a series of measures tailored especially for these two groups of firms.

Institutions for Microenterprises

Information asymmetries, enforcement problems and transaction costs combine to make extremely difficult the delivery of credit to microenterprises whenever one is serious about debt recovery. We do not believe that doling out funds to microenterprises without concern for recovery is justifiable either on grounds of equity -- only a few fortunate microenterprise benefit -- or efficiency -- it fosters exactly the wrong kind of mentality and attitude to be successful in business. Poverty alleviation is better served by welfare programs and the delivery of social infrastructures than by lax credit to a handful of microenterprises. What then should be the objective of a credit program to microenterprises? One possibility is to foster the extension of the microenterprise *sector* by the multiplication of the number of microenterprises. Achieving this objective requires helping individuals setting up their own microenterprise. Although laudable, such effort can only be undertaken at the grassroots and is bound to be onerous per unit of credit disbursed. Another possibility is to help existing microenterprises grow and graduate into the pool of small and medium size firms that we discussed in the preceding section. Both objectives, although often confused in practice, are quite different as to their assumptions regarding the ultimate usefulness of microenterprises (see Fafchamps (1994) for a discussion). The first approach sees nothing wrong with assisting the proliferation of extremely small production units. The second assumes that production by microenterprises is suboptimal but that, for a variety of reasons, one of which being lack of funds, microenterprises are prevented from reaping returns to scale and reaching their full potential. The first approach makes sense in sectors where returns to scale in production, organization and marketing are totally absent, as may be the case in vegetable farming or micro-retail, for instance. The second is more appropriate when returns to even a minimal scale are present, as is typically the case in manufacturing. Since this report is concerned with manufacturing firms, we focus on the second approach.

To be successful, the second approach must identify promising microentrepreneurs and help them graduate into the regular pool of small-scale businesses. In Zimbabwe, the financial institution that has most effectively followed this line is SEDCO (see chapter 3). Because its ultimate objective is to graduate firms, SEDCO puts a lot of emphasis on screening and monitoring. It is not easy to get SEDCO funding. One has to demonstrate commitment and endurance. But these are precisely qualities one expects from a successful business person. We therefore recommend that, as long as SEDCO's objective is to identify promising entrepreneurs, it should not lower its standards. More funds, however, could be piped through SEDCO. The queue of loan applicants is way beyond what SEDCO can

accommodate on the basis of its limited capital. As a result, credit rationing is extreme and the level of endurance that is requested from loan applicants is probably so high that it eliminates a good number of perfectly good candidates. We feel that government special lines of credit would be better disbursed through programs like SEDCO than via highly subsidized loans, like the 5% interest CGC loans that were being allocated while we were in Zimbabwe.

In line with its objective of helping selected microenterprises grow, SEDCO puts a lot of emphasis on training. In our interviews, we developed the feeling that, among microenterprises, a dominant mental attitude is to try to 'beat the system'. Entrepreneurs with such a mind set cannot survive long among small to medium size firms which share a much different business ethic of mutual trust and reliability. We thus feel that part of SEDCO training should be to make entrepreneurs aware of the importance of establishing a good track record for their long run success. Entrepreneurs should be introduced to the mysteries of credit reference and told that business reliability is essential. They should also be told what payment delays are typically considered acceptable and what delays are not. They should be made aware that business registration and operating a checking account are ways through which they can upgrade their credit standing. They should be encouraged to seek title on their property so that they can get a band overdraft facility. In other words, they should be told the rules of enterprise finance that prevail among small and medium Zimbabwean enterprises.

There are other forms of institutional innovations that could help promising microenterprises grow. One is to follow UDC's model but for smaller enterprises, that is, to facilitate the hire purchase of second hand equipment for microenterprises and small firms. In practice, this means setting up or expanding the existing market for second hand equipment to encompass smaller and older pieces of equipment. It may also require more flexibility in contractual terms than currently possible under the Hire Purchase Act. As the market develop, the collateral value of the equipment should increase and the lender's risk decrease. Through the regular repayment of such hire purchase agreements, microentrepreneurs could also accumulate a track record that help them qualify for other sources of credit later on.

We spoke about titling in section 1. It appears that some microentrepreneurs have real property, in Harare townships for instance, that could serve as security for a bank overdraft. But they often do not have sufficient funds to cover the costs of securing a formal title. The government may wish to consider simplifying procedures for the acquisition of title in residential areas where the bulk of microentrepreneurs live. One cannot overemphasize the importance of securing a bank overdraft as a first step into establishing one's reputation as a *bona fide* business.

Regarding the first objective listed at the top of this section, namely the promotion of the microenterprise sector as a whole, a number of potential institutional innovations have received increased attention in the recent past. Two categories are particularly promising: group loans relying on peer monitoring; and the use of rotating savings and credit associations or savings collectors to channel credit to microenterprises. In part because sample design eliminated the smallest of firms, we collected no evidence on either of these credit delivery systems during the case study survey. We thus have little to contribute to the debate regarding their possible effectiveness. Some of the people we spoke to, however, expressed concerns that group loans are costly to administer because group cohesion is hard to sustain when some borrowers fall into arrears. For that reason, channelling funds through savings associations or collectors is probably more cost effective. As far as we can judge from the limited evidence we collected, savings associations seem unimportant in Zimbabwe. There also appears to be no statute for savings and loans associations. Small depositors often put their savings in building societies or the Post Office, but these institutions do not make small loans to individuals.

The Zimbabwean government may want to consider encouraging the emergence of financial institutions that channel at least part of the savings of small depositors back to them in the form of consumption and small investment loans. There are several ways of achieving this. The Kenyan system of SACCOs (Savings Associations and Credit Cooperatives) is one possibility. In this system, small depositors can withdraw up to 3 or 4 times their savings, provided two other depositors gives their guarantee. Others have also suggested that a flexible legal status for rotating savings and credit associations (ROSCAs) and savings collectors be defined so that they can be used to channel and deliver credit to small investors (Aryeetey and Steel (1993)).

Institutions for African-Headed Firms

We have seen that African-headed firms experience problems in accessing external finance that can not solely be attributed to their smaller size and young firm age. These difficulties are due to two partly overlapping factors:

network effects and statistical discrimination. Network effects tend to penalize African-headed firms because blacks are largely outside the 'old boys network', that is, the web of social interactions that link wealthy whites and Asians with the corporate and financial world. As several respondents emphasized, a 'new boys network' linking black businessmen and people of influence is gradually being formed, but it has not reached the clout that the old boys network still commands. Until that time that the new boys network is as powerful as the old boys network, black business men and women will be at a disadvantage. Statistical discrimination is a distinct phenomenon, one that has little to do with contacts and a lot to do with relying on visible characteristics to infer someone's type. Statistical discrimination in financial and trade credit plays against blacks because they belong to a group of entrepreneurs which, on average, are smaller and thus more fragile financially. As a result, rational lenders are more reticent to grant credit to black entrepreneurs than to whites or Asians. In addition to all the difficulties inherent to any credit contract, promising black entrepreneurs must thus also differentiate themselves from the mass of microenterprises headed by blacks. Statistical discrimination tends to perpetuate itself because it breeds prejudice and, by hindering certain firms' access credit, makes it harder for them to handle liquidity shocks and thus *de facto* turns them into less reliable debtors.

It is not easy to devise forms of policy intervention that correct these inequalities. Yet, without intervention, they may persist for an unacceptable length of time. The first form of intervention consists in fostering and strengthening the new boys network. Many respondents hinted that this is indeed taking place through political connections. We were told, for instance, that certain sectors of activity, like public transports in Harare, were earmarked to particular political interests. There is not doubt that a black bourgeoisie has rapidly emerged since independence and that its wealth has initially been acquired, as elsewhere in Africa, thanks to political contacts. Members of this bourgeoisie are now moving into business at large and manufacturing in particular. With time, therefore, one should witness an Africanization of business in Zimbabwe. Such development may, however, fail to benefit the mass of black entrepreneurs who, for the most part, are not politically connected. Furthermore, it is not known whether newcomers will continue to be coopted in the new boys network, or whether, once a certain size achieved, the club will close its ranks.

To help the mass of black entrepreneurs, then, one must fight statistical discrimination. Given Zimbabwe's history, it is unlikely that the problem can be eliminated without some form of affirmative action. The Zimbabwe government has experimented with targeting certain lines of credit to blacks -- 'indigenous entrepreneurs' as the politically correct jargon of the moment calls them. According to certain people we spoke to, there has been considerable resistance to such practices by the established business community: 'we are all indigenous entrepreneurs' has been the war cry of many of its members. It is of course beyond the scope of this report to comment on these highly sensitive political issues. What we can do, however, is to comment on the conditions for the success of a targeted credit program. As Coate and Loury (1993) emphasized, affirmative action can backlash whenever it results in a patronizing equilibrium in which the target population is assisted but prejudice remains. Applied to enterprise credit, this principle suggests that targeted credit programs should avoid generating an 'assisted' mentality. Rather, they should strive to help black enterprises to join the ranks of existing firms and be able to compete with them on the same terms. As far as we can judge, the 5% CGC loans are precisely an example of counterproductive targeting because they convey the idea that blacks deserve special conditions. In addition, because the loans have a heavily subsidized interest rate, their allocation suffers from all the usual problems associated with rationing. Loan applicants attempt to manipulate the outcome of the rationing process, e.g., it is argued, by bribing CGC officials, splitting large firms into smaller ones in order to qualify, or using token blacks as front man. In the long run, SEDCO and Venture Capital of Zimbabwe serve black entrepreneurs better than highly visible, politically motivated loans.

Another approach that has been tried and should be continued is the credit guarantee program. In this program, a special line of credit or credit guarantee is earmarked for small projects. The funds are made available to all financial institutions who take care of retailing them according to program guidelines. The funds are allocated in pro rata to the financial institution's past success in reaching small businesses. To make participation to the program attractive for financial institutions, the funds are typically lend to them at a low interest rate and the loans are partly insured by CGC. All financial institutions seem to have responded positively to the program by setting up Small Business Units and emulating some of SEDCO's practices. Recently, however, interest in the program has faltered as many financial institutions feel small borrowers cannot afford the high interest rates currently prevailing in Zimbabwe. Once interest rates return to more reasonable levels, the continuation of this program should help small businesses gain better access to credit and thus benefit small African entrepreneurs. What the program can probably *not* achieve is the

delivery of credit to microenterprises. To do this, alternative credit delivery systems are required. We discussed some of them in the preceding sub-section.

Section 3. Macro and Industrial Policy

There is a debate in the literature as to whether the financial structure can be an impediment to growth (see chapter 2 for a discussion). There is no doubt in our mind that without a proper credit delivery system, an economy can not embark on a catching-up growth path. We have also amply demonstrated that access to credit, in Zimbabwe as in other places, is unequal and that institutional innovations can help certain types of borrowers gain better access to external finance. Unequal access to credit hurts efficiency because it prevents the expression of the full potential of a country's best resource, its people. As one television commentator put it, taking about the Olympic games: 'Over the past decades, records have been steadily increasing, in part because more and more countries can afford to participate and athletes are drawn from an ever expanding pool of people'. One just has to watch East African long distance runners to be convinced of the truth of this proposition. Similarly, drawing upon a larger pool of potential entrepreneurs can only improve the combativeness of the Zimbabwean economy and bring out its full potential. For candidate entrepreneurs of all races, sex, and ethnic background to be given a fair chance to participate, the credit delivery system must be able to reach everywhere and screen out the good 'athletes' from the bad. We made numerous suggestions to that effect in the preceding two sections.

It remains, however, that ensuring a better distribution of credit would do an economy little good is no credit was available and if there were no opportunities to invest. In Zimbabwe, the availability of credit to manufacturing firms is seriously hampered by crowding out. Financial liberalization has made visible the extent of the public deficit. Tight monetary policy has forced the government to finance the deficit through bonds instead of money creation. As a result, domestic credit has dried up for private uses. In a liberalized system, the reallocation of credit from private to public uses has required a sharp rise in the nominal (and real) interest rate to discourage certain demanders of credit. The government of Zimbabwe is aware of the problem and has made significant efforts to reduce the deficit (see chapter 1). These efforts must be continued if more domestic credit is to become available to the private sector, and to manufacturing in particular.

Opportunities to invest depend on a variety of factors. There is currently no agreement within the economic profession as to which factors are most important and what role policy should play. Consider manufacturing exports, for instance. After decades of protectionism, Zimbabwe has liberalized its external trade. The country's manufacturing sector seems to have withstood the shock remarkably well, although there have been some major casualties. As the RPED report 'African Can Compete' has shown, the reforms have put in place some of the essential conditions for manufacturing exports to become competitive. Discussions with respondents nevertheless indicate that these conditions have not been sufficient to significantly increase investment opportunities in export oriented manufacturing. On the contrary, the alignment of relative prices with international markets seems to have encouraged a shift of investors' interest toward mining (e.g., the platinum mine project) and agriculture (e.g., the boom in horticulture). How then can investment opportunities in manufacturing be fostered?

Given the existence of returns to scale in the use of technology-based machinery, investment opportunities depend on the size of the market. Expanding the market can thus help manufacturing. The size of the domestic market, in a country like Zimbabwe, depends on the prosperity of its primary sector, as the drought of 1992 has demonstrated *a contrario*. Investing in primary production thus will, in time, generate new investment opportunities to serve the additional domestic demand. The expansion of tourism should open new opportunities for import substitution. Investment opportunities also depend on the size of the perceived foreign market, and thus on the ability of Zimbabwean producers to compete abroad. In this respect a negotiated access to the South African market would clearly help the more export oriented among Zimbabwe's manufacturers, and create new investment opportunities to take advantage of Zimbabwe's lower labor cost.[28] Zimbabwe could similarly continue to reinforce its SADCC and PTA links with neighboring African countries, taking advantage of its superior expertise in manufacturing to penetrate their domestic markets. Zimbabwe's access to more distant international markets is hindered by its lack of direct access to the ocean. One can only hope that, with the end of the civil war in neighboring Mozambique, the ports facilities in Beira can be upgraded and rail traffic increased, thereby providing Zimbabwe with a cheaper access to international

[28]Public rumor has it that the cost of industrial labor is three times higher in South African than in Zimbabwe.

freighters. The government may also amplify its export promotion effort and provide incentives to exporters. Some of these incentives could take the form of a subsidized foreign exchange guarantee scheme for exporters, of special lines of credit for pre-shipment finance, and of an export insurance scheme along the lines of those in place in most developed countries.

Conclusion

Zimbabwe is at the crossroads. Economic liberalization has brought new expectations and anxieties in the country. Will the reforms succeed in bringing sustainable development? The political changes that have taken place in neighboring countries, particularly in South Africa and Mozambique, have removed major obstacles to the region's peace and prosperity. After decades of relative isolation, can Zimbabwe take advantage of these new developments? This report sheds some light on one aspect of the big picture, namely, enterprise credit in the manufacturing sector. We have shown that the Zimbabwean financial sector, in spite of all its sophistication relative to other African countries, can still be perfected. Our results indicate that the problems manufacturing firms face in accessing external finance vary a great deal depending on their size, the ethnic background of the owner or manager, and their rate of expansion. We made specific suggestions to improve financial intermediation as it affects firms, and to assist indigenous entrepreneurs gain more prominence. We believe that these suggestions can help the country meet the new challenges it now faces and we also hope that other African countries can emulate the example of Zimbabwe and benefit from the evidence we have described here.

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